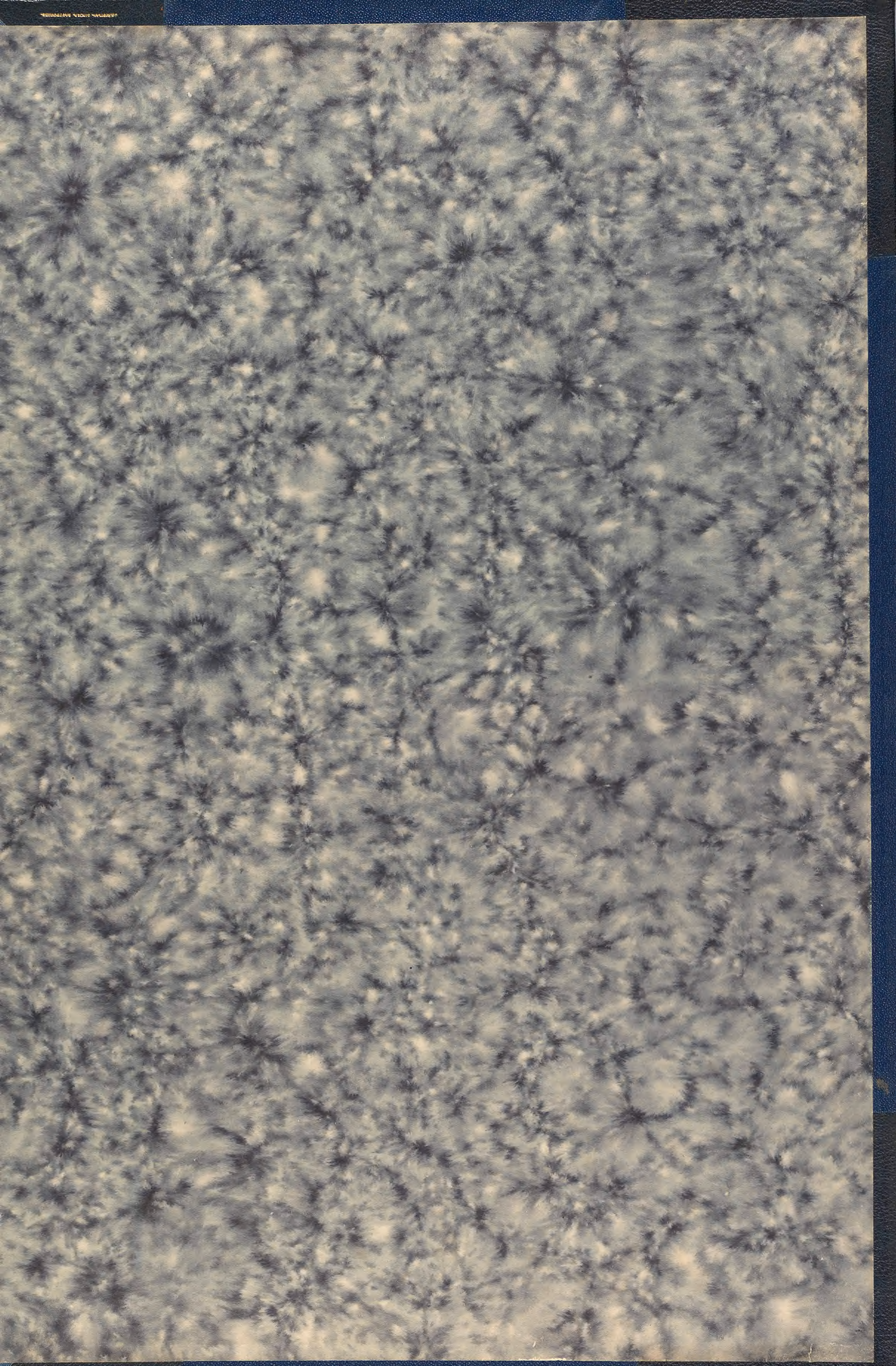

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A

MONOGRAPH

OF

THE MACROPODIDÆ,

OR

FAMILY OF KANGAROOS.

BY

JOHN GOULD, F.L.S., F.Z.S., &c.

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MACROPUS MAJOR. *Shaw*

MACROPUS MAJOR, *Shaw.*

Great Grey Kangaroo.

Spec. Char.—*Macropus vellere corporis, supernè, e cinereo fusco, apùd antibrachios et abdomen canescenti-cinereo, antipedibus, pedibus posticis, caudæque apice nigris; lineâ albescente suprà labium per genas excurrente.*

Descr.—All the fur on the upper surface uniform greyish brown above, passing into grisly grey on the arm and under surface; a faint line of greyish white above the upper lip and along the sides of the face; hands, feet, and tip of the tail black.

	Male. feet.	inches.	Female. feet.	inches.
Length from the nose to the extremity of the tail	7	10	5	11½
„ of tail	3	2	2	4½
„ „ tarsus and toes, including the nail	1	3	1	½
„ „ arm and hand, including the nails	1	6		10½
„ „ face from the tip of the nose to the base of the ear		9		8
„ „ ear		5½		5

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There can be little doubt of the present species being that noticed by our celebrated navigator Cook, in his voyage round the world in 1770; and as I conceive all information connected with this early-known species will be interesting, I shall commence my account of its history with a quotation from the above-mentioned work.

"On Friday, June the twenty-second, while stationed for a short time on the south-east coast of Australia," says Captain Cook, "a party, who were engaged in shooting pigeons for the use of the sick of the ship, saw an animal, which they described to be 'as large as a greyhound, of a slender make, of a mouse-colour, and extremely swift.' The following day the same kind of animal was again seen by a great many other people. On the twenty-fourth it was seen by Captain Cook himself, who, walking at a little distance from the shore, observed a quadruped, which he thought bore some resemblance to a greyhound, and was of a light mouse-colour, with a long tail, and which he should have taken for a kind of wild dog, had not its extraordinary manner of leaping, instead of running, convinced him of the contrary. Mr. Banks also obtained a transient view of it, and immediately concluded it to be an animal perfectly new and undescribed.

"The sight of a creature so extraordinary could not fail to excite, in the mind of a philosophic observer, the most ardent wishes for a complete examination. These were at length gratified; Mr. Gore, one of the associates in the expedition of Captain Cook, having been so fortunate as to shoot one in the course of a few days."

Such is the earliest notice to be found relative to this fine species, of which living examples were a few years afterwards brought to Europe, and have from time to time formed an interesting addition to our menageries. It is however remarkable, that though it has now been introduced for so long a period, all attempts at naturalizing it have hitherto proved futile; still, from my own observations of the animal in a state of nature, I am led to believe that a small degree of perseverance is alone requisite to effect so desirable an object. Should I be so fortunate as to interest any who have the means, as well as the inclination, in the furtherance of this object, we may yet hope to see our large parks and forests graced with the presence of this highly ornamental and singular animal. That it would bear the severities of our winters is almost beyond a doubt, since in Van Diemen's Land, among other places, it resorts to the bleak, wet, and frequently snow-capped summit of Mount Wellington. The kind of country which appears most suitable to its nature, consists of low grassy hills and plains, skirted by thin open forests of brushwood, to the latter of which, especially on the continent of Australia, it resorts for shelter from the oppressive heat of the mid-day sun. Although the numbers of this large species are becoming greatly reduced in consequence of the intrusion of civilized man, and though it has disappeared from those localities where he has taken up his abode, accompanied by his vast flocks and herds, still the immense tracts of sterile unwatered country which characterize Australia, and present physical obstacles to cultivation, will, in my opinion, for a long period afford a sufficient asylum for the preservation of the race.

It enjoys a wide range of habitat, being spread over the colony of New South Wales, the interior to the northward as far as it has yet been penetrated, as well as the whole of the intermediate country between New South Wales and South Australia, where I observed it tolerably abundant; but I am induced to believe this latter district is almost the boundary of its range westward, although, on this point, I may be in error.

I should consider it as not, strictly speaking, a gregarious animal, as I have never seen more than six or eight together, and have more frequently met with it singly or in pairs. Its senses of smelling and hearing are so exquisite that it is extremely difficult of approach without detection, and to effect this it is always necessary to advance against the wind. It browses upon various kinds of grasses, herbs and low shrubs, a kind of food which renders its flesh well-tasted and nutritive. The early dawn and evening are the periods at which it feeds, and at which it is most certain to be met with.

Although hunted and frequently killed by the Dingo, its most formidable antagonist has hitherto been the Aborigine, who employs several modes of obtaining it; sometimes stealing upon it with the utmost caution under covert of the trees and bushes, until it is within the range of his spear, which is generally thrown with unerring aim; at other times, having discovered their retreat, the natives unite in a party, and, forming a large circle gradually, close in upon them

with shouts and yells, by which the animals are so terrified and confused, that they easily become victims to the bommerengs, clubs and spears which are directed against them from all sides.

Still, however formidable an enemy the Aborigine may have been, the Great Grey Kangaroo finds, at the present time, a far greater one in the white man, whose superior knowledge enables him to employ, for its destruction, much more efficient weapons and assailants than those of the more simple son of nature. Independently of the gun, he brings to his aid dogs of superior breed, and of so savage a nature, that the timid kangaroo has but little chance when opposed to them. These dogs, which run entirely by sight, partake of the nature of the greyhound and deerhound, and from their great strength and fleetness are so well adapted for the duties to which they are trained, that its escape, when this occurs, is owing to peculiar and favourable circumstances, as, for example, the oppressive heat of the day, or the nature of the ground; the former incapacitating the dogs for a severe chase, and the hard ridges which the kangaroo invariably endeavours to gain giving him a great advantage over his pursuers. On such grounds the females in particular will frequently outstrip the fleetest greyhound, while, on the contrary, heavy old males, on soft ground, are easily overtaken. Many of these fine kangaroo-dogs are kept at the stock-stations of the interior for the sole purpose of running the kangaroo and the emu, the latter being killed solely for the supply of oil which it yields, and the former for mere sport, or for food for the dogs. Although I have killed the largest males with a single dog, it is not generally advisable to attempt this, as they possess great power, and frequently rip up the dogs, and sometimes even cut them to the heart with a single stroke of the hind leg. Three or four dogs are more generally laid on, one of superior fleetness to "pull" the kangaroo, while the others rush in upon and kill it. It sometimes adopts a singular mode of defending itself by clasping its short powerful fore-limbs around its antagonist, leaping away with it to the nearest water-hole, and there keeping it beneath the surface until drowned; with dogs the old males will do this whenever they have an opportunity, and it is said that they will also attempt to do the same with man. In Van Diemen's Land the *Macropus major* forms an object of chase, and like the deer and fox in England, is hunted with hounds; and twice a week, during the season, the Nimrods of this distant land may be seen, mounted on their fleet steeds, crossing the ferry of the Derwent, at Hobart Town, on their way to the hunting-ground, where they seldom meet without "finding." The following particulars of the "hunt" have been obligingly forwarded to me by the Honourable Henry Elliot, late aide-de-camp to His Excellency Sir John Franklin, and one of its chief patrons.

"I have much pleasure in telling you all I know of the kangaroo-hunting in Van Diemen's Land. The hounds are kept by Mr. Gregson, and have been bred by him from foxhounds imported from England; and though not so fast as most hounds here now are, they are quite as fast as it is possible to ride to in that country.

"The 'Boomer' is the only kangaroo which shows good sport, for the strongest 'Brush Kangaroo' cannot live above twenty minutes before the hounds; but as the two kinds are always found in perfectly different situations, we never were at a loss to find a Boomer, and I must say that they seldom failed to show us good sport. We generally 'found' in a high cover of young wattles; but sometimes we 'found' in the open forest, and then it was really pretty to see the style in which a good kangaroo would go away. I recollect one day in particular, when a very fine Boomer jumped up in the very middle of the hounds, in the 'open'; he at first took a few high jumps with his head up, looking about him to see on which side the coast was clearest, and then, without a moment's hesitation, he stooped forward and shot away from the hounds, apparently without an effort, and gave us the longest run I ever saw after a kangaroo. He ran fourteen miles by the map from point to point, and if he had had fair play, I have very little doubt but that he would then have beat us; but he had taken along a tongue of land which ran into the sea, so that, on being pressed, he was forced to try to swim across the arm of the sea, which, at the place where he took the water, cannot have been less than two miles broad; in spite of a fresh breeze and a head sea against him, he got fully half-way over, but he could not make head against the waves any further, and was obliged to turn back, when, being quite exhausted, he was soon killed.

"The distance he ran, taking in the different bends in the line, cannot have been less than eighteen miles, and he certainly swam more than two. I can give no idea of the length of time it took him to run this distance, but it took us something more than two hours; and it was evident, from the way in which the hounds were running, that he was a long way before us; and it was also plain that he was still fresh, as, quite at the end of the run, he went over the top of a very high hill, which a tired kangaroo never will attempt to do, as dogs gain so much on them in going up hill. His hind quarters weighed within a pound or two of seventy pounds, which is large for the Van Diemen's Land Kangaroo, though I have seen larger.

"We did not measure the length of the hop of this kangaroo; but on another occasion, when the Boomer had taken along the beach, and left his prints in the sand, the length of each jump was found to be just fifteen feet, and as regular as if they had been stepped by a serjeant. When a Boomer is pressed, he is very apt to take the water, and then it requires several good dogs to kill him; for he stands waiting for them, and as soon as they swim up to the attack, he takes hold of them with his fore-feet, and holds them under water. The buck is altogether very bold, and will generally make a stout resistance; for if he cannot get to the water, he will place his back against a tree, so that he cannot be attacked from behind, and then the best dog will find in him a formidable antagonist.

"The doe, on the contrary, is a very timid creature; and I have even seen one die of fear. It was in a place where we wished to preserve them, and as soon as we found that we were running a doe, we stopped the hounds just at the moment they were running into her. She had not received the slightest injury, but she lay down and died in about ten minutes. When a doe is beat she generally makes several sharp doubles, and then gets among the branches, or close to the trunk of a fallen tree, and remains so perfectly still, that she will allow you almost to ride over her without moving, and in this way she often escapes. A tolerably good kangaroo will generally give a run of from six to ten miles; but in general they do not run that distance in a straight line, but make one large ring back to the place where they were found, though the larger ones often go straight away."

An extraordinary difference is observable in the size of the sexes of this species, the female being not more than half the size of the male: she brings forth one young at a time, which as soon as it is clothed with hair assumes the colouring of the adult.

The specimens from which my drawings and descriptions are taken were killed in the neighbourhood of the Liverpool range in the middle of summer, and are both adults; I have, however, seen larger examples of the male. A slight variation is found to exist in specimens from different localities, some being much darker than those represented in the Plate, and others of a foxy-red. Albinoes are occasionally, but very rarely, to be met with. As might reasonably be expected also, the fur is much thicker and more woolly in winter than in summer.

The Plate represents an adult male and female.

NATIONAL MUSEUM OF VICTORIA

MACROPUS LANIGER.

Great Red Kangaroo.

Spec. Char.—Mas. *Macropus vellere brevi, molli, et quasi gossipino; colore arenaceo-rufo; capite humerisque cinereis, et arenaceo-rufo levitèr tinctis; corpore subtùs exalbescente arenaceo-cinereo; artubus caudâque albidis; digitis nigris; rostri lateribus albis nigro variegatis.*

Fœm. *Colore corporis superioris cæruleo-cinereo; inferioris, et artuum albo; faciei lateribus strigâ albâ distinctè notatis.*

Descr.—Male. General colour sandy red slightly tinged with orange, especially on the flanks and rump; neck, back and shoulders washed with ashy grey; the same tint, but somewhat paler, is also observable on the outer side of the thigh; head deep ashy grey, tinged in parts with sandy red; sides of the muzzle as far as the angle of the mouth and the chin pure white; intermingled with the white of the muzzle are some bristly black hairs, forming two interrupted black lines; ears grey on the exterior, with a few black hairs near the tip, and white on the interior; throat, chest and all the under surface tawny white tinged with grey; arms and legs tawny white; hands and toes blackish brown; tail tawny white tinged with grey.

Female. General tint rather paler; the sandy red on the sides of the body less distinct; head and shoulders of a paler grey, and as well as the haunches tinged vinous: differs also from the male in having a distinct broad white mark extending from the angle of the mouth backwards under the eye, and in having the under parts of the body and limbs pure white.

Young. The upper parts of the body of nearly a uniform pale slate-grey.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	8	2	7	0
„ of tail	3	0	2	9½
„ „ tarsus and toes, including the nail	1	2	1	0
„ „ arm and hand, including the nails	1	6½	1	0
„ „ face from the tip of the nose to the base of the ear		8		8
„ „ ear		5½		4½

Kangurus rufus, Desm. Mamm. Suppl. p. 541.

Kangurus laniger, Quoy et Gaim. Voy. de l'Uranie, p. 65, pl. 9.

This noble species of Kangaroo, the largest and one of the most elegant of its race yet discovered, has hitherto been so little known, that, with the exception of my own specimens, a single skin, and that in the most imperfect condition, is all that has ever reached Europe. The specimen referred to is the original of the figure and description in the zoology of the "Voyage de l'Uranie" as quoted above. The specific term of *laniger* appeared so inapplicable to my specimens, as, together with the inaccuracy of the plate and description, to induce me to question their identity; and in order to clear up this doubt satisfactorily I visited the Parisian museum and examined the original, when I found, to my great astonishment, that the deficiencies of natural hair on many parts of the skin had been replaced by finely cut sheep's wool, whereby the appellation of Woolly Kangaroo was rendered more correct than I had anticipated: it would have been better for science had this circumstance been stated. The sides and upper surface of the body of those I brought to Europe are the only parts of the animal that have any tendency to the woolly character, and the hair on these parts entirely wants that crispness mentioned by Messrs. Quoy and Gaimard. The specimen in the museum of the Jardin des Plantes was presented to the officers of the expedition by Fraser the botanist, during their stay at Sydney, and was said to be from Port Macquarrie; but I am led to believe that some mistake must have arisen on this point, and that the Macquarrie river was the locality intended, since it is an animal entirely confined to the interior.

Two of my specimens were obtained in South Australia, and the others on the plains bordering the Namoi; from the works of Oxley and Sturt we find that it frequents the banks of the Morumbidgee and Darling; we may consequently infer that it is very generally dispersed over the great basin of the interior of Australia, as it certainly is over the eastern portions of that continent. I regret that these authors should have given such slight notices of this interesting animal, which they must have frequently encountered in their expeditions. Capt. Sturt merely states, that while encamped on the Morumbidgee "we saw several red kangaroos, and succeeded in killing one. It certainly is a beautiful animal, ranging the wilds in its native freedom. The female and kid are of a light mouse-colour." Having, like Capt. Sturt, had the pleasure of seeing this species in its native wilds, I fully concur in his opinion as to its beauty; it is, in fact, the finest of the Australian Mammalia: and the female is particularly attractive, from her graceful, slender, and elegant form, and from the snowy whiteness of her legs and under surface contrasted with the blue-grey tint of her sides and back. The male, especially when adult, has the red and white more blended into each other; the blue-grey which distinguishes the female, being rarely if ever perceptible; hence has arisen the trivial names of red buck and blue doe for the two sexes respectively: the female is also called the flying doe, from her extreme fleetness, for which her whole structure is so admirably adapted, that I have little hesitation in saying, that under favourable circumstances she would outstrip the fastest dogs: occasionally, however, both sexes are run successfully, either from the chase being over soft mouldy soil, or from the female being encumbered by a large and heavy young one, which she has not been able to

disengage from the pouch, and which she will always do, if possible, when hardly pressed. The beautiful female represented in the accompanying Plate was captured under these circumstances. Having observed a pair sheltering themselves from the heat of the sun under a small group of Myalls (*Acacia pendula*) on the plains near the Namoi, I succeeded in leading a fine dog to within seventy yards of them without being perceived. The dog was so quickly at the heels of the one he took after, and which was carrying a large young one, that her escape was impossible.

The male figured by her side was also procured by a single dog, which after a short chase "pulled" and kept him at bay until I came up and assisted in despatching him, but not before he had made a fearful resistance.

Although the Great Grey and Great Red Kangaroos frequently inhabit the same portions of the country, still they affect localities of a different description; the former resorting to grassy valleys and "brush growing on the dark mouldy soil," whilst the latter confines itself to the hard red stony ridges clothed with box, and open plains, in the midst of which it may frequently be seen in the daytime basking in the sun. The large male (the weight of which I judge to be above two hundred pounds) was killed while we were making a forced march between the Murray and Adelaide, at a time when all our provisions were exhausted, and I can therefore speak with a lasting recollection of the goodness of its flesh, which sustained me and my party for four days.

MACROPUS FRANATUS: *Gould.*

MACROPUS FRÆNATUS, *Gould.*

Bridled Kangaroo.

Spec. Char.—*Macropus vellere molli brevi, colore e fusco cinereo; corpore subtùs albo; ab occipite utrinque super humeros lineâ angustâ albâ; interspatio occipiteque nigrescente: caudâ tuberculo parvo corneo pilis nigrescentibus abscondito ad apicem instructâ; tarsis artubusque anticis ferè albis, digitis pilis obscuris paucis adspersis.*

Descr.—Fur short and soft; general tint of the upper surface grey; under surface white; a white line diverges from the occiput on each side backwards over the shoulder, and passes into the white of the belly a little behind the insertion of the arms; the space between these lines is blackish brown, narrow at the occiput and gradually expanding as it approaches the shoulder, where the colour blends into the ordinary tint of the upper parts; tail mingled black and white, the black predominating on the upper and under surface of the extremity; on the chin a small dusky mark; legs whitish; upper surface of the feet mingled black and white; arms very pale grey, internally white; hands mingled black and white, tinged with brown on the fingers; inner surface of the ears white; a white mark from the tip of the muzzle to beneath the eye; on the sides of the neck a wash of rich cream colour.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	3	$7\frac{1}{2}$	2	$8\frac{1}{2}$
„ of tail	1	7	1	3
„ „ tarsus and toes, including the nail		$6\frac{1}{2}$		5
„ „ arm and hand, including the nails		5		4
„ „ face from the tip of the nose to the base of the ear		$3\frac{3}{4}$		$3\frac{1}{2}$
„ „ ear		$3\frac{1}{2}$		$3\frac{1}{4}$

Macropus frænatus, Gould in Proc. of Zool. Soc., Part VIII. p. 92.

This elegant little Kangaroo, whose weight varies from ten to fifteen pounds, is an inhabitant of the part of New Holland to the northward of the Liverpool Plains, and in all probability will hereafter be found to range over a great extent of country towards the central portion of Australia.

The paucity of information that has been obtained respecting the Kangaroos of the interior, particularly those so strikingly marked as the present species, is somewhat remarkable, considering the number of scientific men who have at different periods traversed various portions of the country which these animals inhabit: as far as I am aware, none of the works of Oxley, Sturt or Mitchell make the slightest mention of the one here represented. On arriving in the colony, skins of the animal were presented to me by Mr. Stephen and Mr. Charles Coxen, and I afterwards had the satisfaction of frequently meeting with it in a state of nature, and of gaining some information respecting its habits. The nearest point to the colony at which I encountered it was Brezi, on the river Mokai, whence it extended into the interior as far as I had an opportunity of proceeding. It inhabits all the low mountain-ranges similar to those of Brezi, whose elevation varies from one to five or six hundred feet, and which are of a sterile character—hot, dry, stony, and thinly covered with shrub-like stunted trees. These situations are also the abode of the *Halmaturus dorsalis*, with which I sometimes found the *Macropus frænatus* associating; but it differs from that species, which is strictly an inhabitant of the brushes, in frequenting the more open parts and occasionally even the plains. When started from its seat, which is formed like that of a hare, and sheltered by a tuft of grass or a small bush, it bounds away with remarkable fleetness, generally giving the best dogs a sharp run, and frequently effects its escape by gaining the thick part of the brush, or the hole of a decayed tree. And I recollect on one occasion, that on being sharply pressed, the animal mounted the inside of the tree, to an opening nearly fifteen feet from the ground, whence it leaped down before the dogs, and succeeded in reaching the hollow trunk of a fallen tree, from which it was finally taken by the hand.

In the neighbourhood of Brezi the natives hunt this species with dogs, and often kill it with spears, bommerengs and other weapons; but at Gundermein, on the Lower Namoi, I found myself among a tribe who succeed in capturing them with nets, which, although rudely constructed, are very well adapted to the purpose. On being made acquainted with my object, the tribe were easily induced to accompany me to the Brigaloe brush, in which the present species and the *Halmaturus dorsalis* were very abundant: arriving at the skirts of the brush, the oldest men of the tribe separated from the rest, each two taking a net about twenty-five yards long by three and a half feet wide, with which they proceeded to those parts where the runs of the animals were most frequent, while the rest of the natives entered the brush on the opposite side, to beat the bushes, and with loud shouts and yells drove the Kangaroos towards the nets: by this means in a single afternoon they obtained for me as many specimens as I required.

This animal always selecting dry ridges entirely devoid of water, is doubtless the reason of its being so little known, such localities being rarely visited by expeditions of discovery.

Its flesh, like that of the other small Kangaroos, is excellent, and when procurable was eaten by me in preference to other meat.

The female is considerably smaller in size, but is not distinguished by any difference in marking from the male; the stripes are quite as intense as in the male, and are even apparent in the fœtus.

Its food consists of grass and various kinds of herbage.

MACROPUS RUFOGRISEUS, *Gould.*

MACROPUS UNGUIFER, *Gould.*

Nail-tailed Kangaroo.

Spec. Char.—*Macropus vellere perbrevi, et mediocritèr molli: colore fulvo; parte corporis anteriore, et collo albescentibus; capite ferè toto, nec non artubus abdomineque albis: notâ fuscâ longitudinali, apud dorsum; caudâ albidâ, apicem versus, pilis longis et fuscis indutâ, ad apicem cum ungue nigrescente, ferè magnitudinem et figuram unguis humani exhibente, instructâ.*

Descr.—Fur very short and moderately soft; general colour buffy yellow, extending on to the outer side of the legs and the base of the tail, and gradually passing into the all but pure white of the head, ears, legs and under surface; on each side of the body just before the knee a pale rusty patch; a brownish mark commences about the middle of the back, runs backward over the rump, and extends to about four inches along the upper surface of the tail; arms and tarsi cream-white; an indistinct yellowish white mark, curving upwards, crosses the thigh at the base; middle portion of the tail brownish, the tip being clothed with a long black tuft, in the centre of which is a thinnish black nail half an inch in length and a quarter of an inch in breadth, convex above and concave beneath, considerably resembling the nail of the human finger.

	feet.	inches.
Length from the nose to the extremity of the tail	4	4
„ of tail	2	2
„ „ tarsus and toes, including the nail		$7\frac{1}{2}$
„ „ arm and hand, including the nails		5
„ „ face from the tip of the nose to the base of the ear . . .		$4\frac{1}{2}$
„ „ ear		$2\frac{1}{2}$

Macropus unguifer, Gould in Proc. of Zool. Soc., Part VIII. p. 93.

This very elegant little Kangaroo, of which I have only seen a single example, was liberally placed in my hands, for the purpose of being described and figured, by Mr. Bynoe of Her Majesty's Ship the Beagle, who had obtained it on the north-west coast during the present expedition of that vessel, whose captains and other officers, not only in this, but in her former voyage, have so largely extended our knowledge of the zoological productions of the little known countries they have visited in the course of their explorations.

This animal peculiarly attracts our attention by the circumstance of its possessing a character not found in any other known member of its family, namely, a broad flattened nail much resembling that of the finger, situated at the extremity of the tail, but which is not ordinarily observable, from its being hidden in the tuft of long black hairs clothing the apical portion of that organ. It is true that a somewhat similar character exists in the *Macropus frænatus*, but in that species it is merely rudimentary.

I regret to add that nothing is at present known respecting its habits and economy.

OSPHRANTER ROBUSTUS, *Gould.*

Black Wallaroo.

Spec. Char.—*Osph. artubus anticis magnis et prærobustis; vellere e fusco cinereo, infernè pallidiore; tarsis fuscis; digitis anticè nigris; antipedibus carpisque nigris; capite fuliginoso levitèr tincto; utrâque genâ lineâ albescente notatâ; gulâ, guttureque albidis; caudâ supernè fuscâ, subtùs pallidiore.*

Descr.—Male. Fur harsh and somewhat shaggy; general colour slate-grey, obscurely washed with brownish, and tinted with vinous on the outer sides of the thighs; feet dark brown, gradually passing into black on the fore-part; upper part of the arm brownish; hands and wrists black; inner surface of the ear white, the exterior brown; muzzle and a patch on the chin blackish; a line round the angle of the mouth and the lower lip white; throat and fore-part of the neck white, the hairs being grey at the base; under surface like the upper, but paler; tail blackish brown above, paler beneath.

Female. General colour silvery grey, obscurely tinted with purplish or vinous on the back; under surface nearly white; cheeks hoary, with a blackish patch on the chin; tail dirty white, slightly tinged with brown on the upper side; legs paler than the body; hands brown, becoming nearly black on the fingers; toes brownish black above.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	7	0	5	10
„ of tail	2	$10\frac{1}{2}$	2	6
„ „ tarsus and toes, including the nail		12	1	$10\frac{1}{2}$
„ „ arm and hand, including the nails		$13\frac{1}{2}$		$9\frac{1}{2}$
„ „ face from the tip of the nose to the base of the ear		8		7
„ „ ear		$3\frac{1}{2}$		3

Macropus (*Petrogale*) *robustus*, Gould in Proc. of Zool. Soc., Part VIII. p. 92.
Black Wallaroo of the Colonists.

The Black Wallaroo inhabits the summits of sterile and rocky mountains, seldom descending to the coverts of their sides and never to their base; few, therefore, have had an opportunity of observing it in a state of nature; indeed there are thousands of persons in Australia who are not even aware of its existence. Although the south-eastern portion of the continent is, I believe, the only part of the country in which it has yet been observed, in all probability it has an extensive range northwards. It is tolerably abundant on the Liverpool range, and I ascertained that it inhabited many of those hills that branch off on either side of this great mountain-chain, both towards the interior as well as towards the coast. Its retreats are so well chosen among the crags and overhanging ledges of rocks, that it is nearly useless to attempt its capture with dogs. It is a formidable and even dangerous animal to approach, for if so closely pressed that it has no other chance of escape, it will rush at and force the invader over the edge of the rocks, as the Ibex is said to do under similar circumstances. Independently of its great muscular power, this animal is rendered still more formidable by the manner in which it makes use of its teeth, biting its antagonist with great severity.

The Black Wallaroo may be regarded as a gregarious animal, four, six and even more being frequently seen in company. On one of the mountains near Turi, to the eastward of the Liverpool Plains, it was very numerous; and from the nature of this and the other localities in which I observed it, it must possess the power of existing for long periods without water, that element being rarely to be met with in such situations.

The summits of the hills to which this species resorts soon become intersected by numerous roads and well-trodden tracks, caused by its repeatedly traversing from one part to the other; its food consists of grasses and the shoots and leaves of the low scrubby trees which clothe the hills it frequents.

Although much shorter in stature, and consequently less elegant in form, the fully adult male of this species equals in weight the largest specimens of *Macropus major*; and so remarkable is the difference in the colour and size of the sexes, that had I not seen them together in a state of nature, I should have considered them to be different species, the black and powerful male offering so great a contrast to the small and delicate female.

PETROGALE BRACHYOTIS: *Gould*

PETROGALE BRACHYOTIS, *Gould.*

Short-eared Rock-Wallaby.

Spec. Char.—*Pet. vellere e fusco cinereo, apud partes inferiores albescente ; caudâ floccosâ, ad apicem nigrâ ; utrâque genâ lineâ albescente notatâ.*

Descr.—General colour greyish brown; under surface of the body dirty white, obscurely tinted with yellowish: on each side of the body, near the base of the fore leg, a dusky patch; a dirty white mark is observable on each side of the head, and an indistinct mark on the base of the thigh; tail moderately bushy, coloured at the base like the body, but the apical third dusky black.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	3	0
„ of tail	1	3
„ „ tarsus and toes, including the nail		5
„ „ arms and hands, including the nails		$3\frac{1}{2}$
„ „ face from the tip of the nose to the base of the ear . . .		$3\frac{3}{4}$
„ „ ear		$1\frac{3}{4}$

Petrogale brachyotis, Gould in Proc. of Zool. Soc., for Oct. 1840.

This new species of Rock-Wallaby was presented to me by Captain George Grey, the present Governor of South Australia, who procured it on the north-west coast while traversing that previously unexplored region. Only two specimens were collected: these fortunately proved to be a male and a female, and apparently adult. It differs from most of the other species with which I am acquainted in the shortness and scantiness of its hair, which may, perhaps, be attributed to the great heat of the latitudes it inhabits, and the peculiar localities to which the animal resorts, viz. hard craggy surfaces exposed to the burning sun. The following account, which has been kindly furnished me by His Excellency, is all that is known respecting it :—

"I procured this species near Hanover Bay, December the 29th, 1837. It is excessively wild and shy in its habits; frequenting in the day-time the highest and most inaccessible rocks, and only comes down to the valleys to feed early in the morning and late in the evening. When disturbed in the day-time it bounds among the roughest and most precipitous rocks, apparently with the greatest facility, and is so watchful and wary that it is by no means easy to get a shot at it. How it can support the excessive heat of the sand rocks amongst which it always lies is to me truly astonishing, the temperature there during the hottest part of the day being frequently 136°. I have never seen this animal on the low land or the plains, and I consequently believe it to be entirely an inhabitant of the mountains."

HALMATURUS BENNETTII.

Bennett's Wallaby.

Spec. Char.—*Halm. pilis subspinosis, corpore suprà fuscescenti-cinereo, clunibus, et regione circum-oculari, rufo-brunneis; corpore subtùs cinerescenti-albo; rostro, auribus posticè, digitis anticis posticisque nigris; lineâ albescente vix distinctâ ab angulo oris, ad genas excurrente; caudâ cinerescente, ad apicem nigrâ, et subtùs sordidè flavescenti-albâ.*

Descr.—Fur rather long and moderately soft; general tint a very deep gray, inclining to black on the back; somewhat paler on the sides of the body, with a rust-like tint on the back of the neck, base of ears, the haunches, shoulders, and in the region of the eye; under surface of the body, and the inner side and fore part of the hinder legs, grayish white; muzzle black; crown of the head brownish black; an obscure whitish line extends backwards from the corners of the mouth, and becomes obliterated on the cheeks; lips dirty white; chin blackish; ears white internally, black externally; hands, toes and outer side of the heel black; hairs of the tail (excepting at the base, where they are of the same colours and character as those of the body) black, broadly annulated with white near the apex; tip of the tail black, under side of the tail white; the hairs on the upper part of the body are of a deep slate colour at the base, the remaining portion of each hair is black annulated with white, or more generally with pale rust colour; on the under parts of the body the hairs are of a deep slate colour with the apical portion white.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	4	2
„ of tail	2	1
„ „ tarsus and toes, including the nail		10
„ „ arm and hand, including the nails		8
„ „ face from the tip of the nose to the base of the ear . . .		6
„ „ ear		3

Macropus Bennetti, Waterh. in Proc. of Zool. Soc. (Oct. 1837), Part V. p. 103.
Halmaturus ualabatus, Gray in Mag. of Nat. Hist., Nov. 1837, vol. i. New Series, p. 583.
Macropus (*Halmaturus*) *fruticus*, Ogilby in Ann. of Nat. Hist., May 1838, vol. i. p. 219.
Brush Kangaroo, Colonists of Van Diemen's Land.

This is not only the largest Wallaby with which we are yet acquainted, but it is the most important, since its flesh is very generally eaten and highly esteemed, and its skin forms a considerable article of commerce, being largely imported from Van Diemen's Land into England for the manufacture of boots and shoes, besides being extensively used for the same purpose in the colony. It is universally dispersed over Van Diemen's Land, whose dense and humid forests afford it a retreat so secure as to preclude all chance of its extermination for centuries to come, although many thousands are killed annually. Advertisements may frequently be seen in the Hobart Town newspapers, stating that three thousand skins are immediately wanted, and they are quickly supplied by the settlers, servants and shepherds at the out-stations: they are either captured by dogs or obtained by snares set in their runs; the skins are generally taken off on the spot, and are afterwards stretched on the ground to dry; they are then sold for about fourpence or sixpence each to persons who visit the stock stations of the interior for the purpose of collecting them, and who retail them again in Hobart Town or Launceston to the advertiser or others for colonial consumption or for exportation.

The Bennett's Wallaby is gregarious in its habits, and although truly a brush animal, does not confine itself so strictly to localities of that description as the smaller members of the genus; but frequently resorts to the thinly-timbered forests and the crowns of the low grassy hills, always, however, seeking security in the thick brush when pursued, or such steep rocky acclivities as present almost insurmountable obstacles to the pursuit with dogs. I believe it to be confined to Van Diemen's Land; at all events the neighbouring islands in Bass's Straits form the extent of its range northwards. This is one of the most hardy members of the family, and would doubtless readily become acclimatized in this country, since the temperature of Van Diemen's Land more nearly resembles that of the British Islands than does any other part of Australia, in proof of which I may mention that numbers have been bred in the Menagerie of the Zoological Society, in that of the Earl of Derby and others. The full-grown male varies in weight from forty to sixty pounds: the haunch and loins are the only parts that are eaten, and these are constantly exposed for sale in Hobart Town, Launceston, and other parts of the country.

The female closely resembles the male in colour, but is about one-third less in size.

MAMMATUS JOHNSONI, Gray.

HALMATURUS URSALIS, Gray.

Black-shouldered Wallaby.

HALMATURUS DORSALIS, *Gray.*

Black-striped Wallaby.

Spec. Char.—*Halm. caudâ longissimâ; colore rufescenti-fusco nigro alboque variegato (vel irrorato) capitis corporisque partibus inferioribus albis; collo humerisque rufis; strigâ nigrâ ab occipite ad dorsi medium eductâ; rostro supernè obscuro, utrinque lineâ albâ notato; dorso imo notâ transversâ albâ; caudâ cinereâ; digitis omnibus nigris.*

Descr.—Fur rather harsh to the touch; general colour brown, with a rusty tinge, produced by each hair being of a rusty brown in the middle; upper surface and sides of the body freely pencilled with black and white; on the back of the neck, shoulders and outer side of the arms a bright rusty red hue prevails, and the same hue is observable on the hinder part of the back, outer side of the hind legs (especially near the knee) and sides of the body, but is much paler; chin, throat, and all the under parts of the body white; tail clothed with very short, adpressed, grisly hairs, becoming longer and of a dirty white on the under side of the apical half; upper surface of the muzzle dusky, with a white line on each side; ears black on the outside, and white internally; a black mark commences near the occiput and proceeds backwards; towards the tail it is broadest, and most distinct on the middle of the back, and becomes obliterated as it approaches the tail; on the haunch a transverse white mark; hands and feet black.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	4	7	3	10
„ of tail	2	1	1	9
„ „ tarsus and toes, including the nail		8		$7\frac{1}{4}$
„ „ arm and hand, including the nails		$8\frac{1}{2}$		$6\frac{1}{4}$
„ „ face from the tip of the nose to the base of the ear . . .		5		$4\frac{1}{4}$
„ „ ear		3		$2\frac{3}{4}$

Halmaturus dorsalis, Gray in Mag. of Nat. Hist. for Nov. 1837, vol. i., New Series, p. 583.

This fine Wallaby, which is distinguished from all other species by the greater length of its tail, and by the black mark which commences at the occiput and runs down the centre of the back, is an inhabitant of the interior, and is particularly abundant in all the scrubs clothing the sides of the hills that run parallel to the rivers Mokai and Namoi; and although I cannot positively assert that such is the case, I have reason to believe that it inhabits all similar situations between the above-mentioned localities and the great Murray scrub in South Australia. I have never heard of its having been seen between the ranges and the coast, a circumstance that may be attributed to the brush being of a totally different character, the vegetation being more dense and humid than the dry stony hills of the interior. Like the other members of the genus it is strictly gregarious; it is in fact so numerous that I found not the slightest difficulty in procuring as many specimens as I pleased, and it was more often shot as an article of food than for any other purpose. Its flesh is excellent, and when the vast continent of Australia becomes more thickly inhabited, it will doubtless be justly esteemed. The natives often resort to the haunts of this species and commit great havoc among them, both for the sake of their flesh as food, and for their skins as articles of clothing.

They have various modes of capturing them, sometimes making use of large nets, at other times they are driven by dogs from side to side of the brush, which affords the hunters abundant opportunities of spearing or killing them with the waddy as they pass the open spots.

It is especially abundant at Brezi, to the northward of the Liverpool Plains, and I also found it extremely numerous in the Brigaloe brush on the Lower Namoi.

The female is distinguished by her smaller size, but in the markings of the two sexes no difference exists. The full-grown males of this species will weigh from twenty to twenty-five pounds.

MACROPUS MANICATUS. Gould.

HALMATURUS MANICATUS, *Gould.*

Black-gloved Wallaby.

Spec. Char.—*Halm. obscurè griseus ; vellere apud partes inferiores pallidiore et flavescente ; capite suprà fuliginoso, occipite necnon auribus externè nigris ; utrâque genâ lineâ flavescente notatâ ; tarsis antipedibusque flavescentibus, antrorsùm nigris ; caudâ nigrâ ad basin griseâ.*

Descr.—General colour of the upper surface of the body deep grey, produced by the admixture of black and white, the hairs being black at the tip, and annulated with white near the tip; sides and under surface of the body paler grey, tinted with buff-yellow; this yellow tint is almost pure on the abdomen between the hind legs, on the feet and inner side of the ears: the upper surface of the head and muzzle are of a soot-like colour, and the occiput and back of the ears, as well as the apical portion in front, are pure black; a yellowish white line is observable on each side of the muzzle, commencing at the tip, and running backwards beneath the eye; the fore half of the hands and feet are pure black, appearing as if they had been dipped in ink or some other black liquid, the black not blending, as usual, with the pale colour of the hind part of the feet, but terminating in an abrupt line; the greater portion of the tail (which is well clothed with harsh hairs) is of the same black colour; at the base, however, it is coloured as the body; and on the upper surface, for a considerable distance from the base, the black hairs are more or less annulated with whitish, producing a grizzled appearance; on the chin is a small black patch.

	Female.	
	feet.	inches.
Length from the nose to the extremity of the tail	5	0
„ of tail	2	3
„ „ tarsus and toes, including the nail		$8\frac{3}{4}$
„ „ arm and hand, including the nails		5
„ „ face from the tip of the nose to the base of the ear . . .		$5\frac{1}{2}$
„ „ ear		$3\frac{1}{2}$

Halmaturus manicatus, Gould in Proc. of Zool. Soc. for Oct. 13, 1840.

This beautiful and singularly marked Wallaby is a native of Swan River, where it would appear to be common, since the rugs usually slept upon by persons who lead a bush-life in Australia are frequently made of its skins. My own specimen, however, is, I believe, the only one that has yet been sent to Europe in a perfect state, although at least forty skins without the head and legs have come under my notice.

The following brief account of this animal has been forwarded to me by Mr. Gilbert, and is, I regret to say, all I have to communicate respecting it:—

"Found and equally abundant in all parts of the colony of Swan River: generally inhabiting scrubby places: may occasionally be seen feeding on the open plains, but always takes to the scrub again when hunted; it runs very fast."

In size it nearly equals *Halmaturus ulabatus* and *Halmaturus Parryi*, to the latter of which it assimilates in many of its characters.

HALMATURUS BILLARDIERII.

H.C. Richter del. et lith.

C. Hullmandel imp.

HALMATURUS BILLARDIERII.

Tasmanian Wallaby.

Spec. Char.—*Halm. vellere denso; pilis ad basin cœruleo-cinereis, apud medium fulvescenti-fuscis, apicibus elongatis nigris; facie, corporeque supernè nigrescenti-fuscis; labiis, gulâ, pectore, corporeque subtùs, fulvis.*

Descr.—Fur very thick, the hairs blue grey at the base, buffy brown in the middle, the tips, which are much produced, ending in black; face and all the upper surface very dark brown, approaching to black, particularly on the shoulders and back, where the hairs become much lengthened; arms and tarsi greyish brown; lips, throat, chest and under surface reddish buff; in some specimens these parts are grey tinged with buff; ears dark brown tinged with buff; upper side of the tail dark brown; under side dirty white.

	feet.	inches.
Length from the nose to the extremity of the tail	3	6
„ of tail	1	1
„ „ tarsus and toes, including the nail		6
„ „ arm and hand, including the nails		$5\frac{1}{2}$
„ „ face from the tip of the nose to the base of the ear . . .		$4\frac{1}{2}$
„ „ ear		$2\frac{1}{2}$

Kangurus Billardierii, Desm. Mamm., Suppl. p. 542.

Macropus (*Halmaturus*) *rufiventer*, Ogilby in Proc. of Zool. Soc., Part VI. (Feb. 1838) p. 23; and in Ann. of Nat. Hist. for May 1838, vol. i. p. 220.

Halmaturus (*Thylogale*) *Tasmanei*, Gray in Ann. of Nat. Hist. for April 1838, vol. i. p. 108.

Wallaby, Colonists of Van Diemen's Land.

I have but little doubt that the habitat of this Wallaby is limited to Van Diemen's Land, and the larger islands in Bass's Straits, in all which localities it is so numerous that the thousands annually destroyed make no apparent diminution of its numbers. In consequence of the more southerly and therefore colder latitude of Van Diemen's Land, the vegetation is there much more dense and humid than on the continent of Australia; indeed the sun never penetrates into many parts of its forests, and accordingly we find this species clothed with a warmer and more sombre-coloured coat. It is consequently of a more hardy nature than any of its congeners, and with care and a slight degree of perseverance it might be easily naturalized in England; indeed I feel confident that if a sufficient number were introduced in a suitable locality, as in some of our forests and large estates of the nobility and gentry, the experiment would be attended with complete success. Independently of the novelty of a species of this singular tribe ranging at liberty in our woods, its flesh could not fail to be highly esteemed for the table. Being one of the best of the small Kangaroos, it is very generally eaten in Van Diemen's Land.

The Tasmanian Wallaby may be regarded as strictly gregarious, hundreds generally inhabiting the same localities; the situations which it frequents are gullies, and the more dense and humid parts of the forest, particularly those that are covered with rank high grass, through and under which it forms numerous well-beaten tracks. From these coverts it seldom emerges, and never even approaches the outskirts of the forest except at night: hence it is seldom seen by ordinary observers. It is very easily taken with snares, formed of a noose placed in its run; and thousands are captured in this way solely for their skins: the sportsman also may readily procure it by stationing himself in some open glade of limited extent, accompanied by two or three small yelping dogs, before which it keeps hopping round and round, and thus affords him an opportunity of shooting it as it passes; for like the common rabbit, it never quits the locality in which it is bred.

Much diversity of colour is observable in different specimens, some having the throat and under surface deep reddish buff, while others have the same parts much lighter.

Its usual weight is from fifteen to twenty pounds, although many are smaller.

HALMATURUS DERBIANUS: *Gray.*

H.C.Richter del.t *C.Hullmandel Imp.*

HALMATURUS DERBIANUS, *Gray*.

Derby's Wallaby.

Spec. Char.—*Vellere intensè fusco, hìc atque illìc rufescente, et incanescente; collo, et artubus rufis; strigâ nuchali fuscâ; caudâ sub-brevi, robustâ, et pilis brevibus adpressis instructâ.*

Descr.—Face grizzled grey, reddish and dark brown; on the upper lip a buffy-white mark which extends backwards under the eye, and blends with the general colour of the face; back of the neck, shoulders and arms rufous; a distinct blackish mark commences at the occiput, and continues downwards until it becomes lost in the colouring of the back, which is grizzled black and dull white, caused by the middle portion of each hair being dull white, and the tips black, the base of all the fur being deep blue grey; hind legs and tarsi grizzled with rufous and black, the former colour predominating; throat, chest and all the under surface buffy white; arms the same as the tarsi, but rather darker; under side of the tail buff.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	3	1
„ of tail	1	$1\frac{1}{2}$
„ „ tarsus and toes, including the nail		6
„ „ arm and hand, including the nails		$4\frac{1}{2}$
„ „ face from the tip of the nose to the base of the ear . . .		$4\frac{1}{2}$
„ „ ear		$2\frac{1}{4}$

Halmaturus Derbianus, Gray in Mag. Nat. Hist., vol. i. New Series, p. 583.

This species is a native of Kangaroo Island situated at the mouths of Spencer's and St. Vincent's Gulfs, and would appear to be confined to small islands of a similar character, since I never observed or heard of its being found on the main land of South Australia; and from information received from Swan River accompanying the skin of an animal which would appear to be identical with the present species, I find it is there confined to Rottnest and Garden Islands: if upon comparison with further examples these two animals should prove to be identical, the islands of the south-western portion of Australia would seem to be the peculiar habitat of the species: I have never heard of it to the east of Kangaroo Island.

Although closely allied to the *Halmaturus Billardierii* of Van Diemen's Land, it exhibits in its smaller dimensions more grizzly hair, and the longitudinal white mark on the cheeks, a decided difference from that animal. Like many others of the small Wallabies, the present species loves to dwell among the densest underwood: hence the almost impenetrable scrub of dwarf *Eucalypti*, which covers nearly the whole of Kangaroo Island, will always afford it a secure asylum, from which in all probability it will never be extirpated; the vegetation being too green and humid to be burnt, and the land too poor to render it worth the expense of clearing. It is very abundant in the ravines and gullies, through which it makes innumerable runs; and such is the dense nature of the vegetation, that nothing larger than a dog can follow it: still it is taken by men residing on the island in the greatest abundance, both for the sake of its skin and its flesh: these men procure it principally by snares, a simple noose, placed on the outskirts of the brush; but they also shoot it when it appears on the open glades at night. An example of this little Wallaby, which is about twice the size of a Hare, was presented by J. B. Harvey, Esq., to the Zoological Society in 1839 or 1840, in whose Menagerie it is now living in perfect health.

Considerable difference exists in this, as well as in the other allied species, in the colour of the hair, which varies very much, not only in the intensity of its hue, but also in being much redder in some specimens than in others.

LAGOTRICHES STES LEPOTRIDES: Gould.

H.C. Walter del.

C. Hullmandel Imp.

LAGORCHESTES LEPOROÏDES, *Gould.*

Hare Kangaroo.

Spec. Char.—*Lag. pro magnitudine et velleris colore nec non texturâ*, Lepori timido *assimilis; capite breviusculo; antibrachiis pedibusque parvulis; caudâ breviusculâ et gracili; corpore supernè nigro, fusco et flavido variegato; apud latera, et circum oculos colore pallidè fulvo prævalente; abdomine e cinereo albo; artubus anticis ad basin nigris.*

Descr.—In size and in the colouring and character of the fur remarkably like a hare: top of the head grizzled black and white; upper surface variegated with black and cream-white (in some specimens with black and pale rusty buff); sides of the body, throat and chest buffy white; chin white; abdomen greyish white; arms blackish at the base; hands buffy white; legs tinged with rusty red; feet brownish white; broad space round the eye buff; ears white inside, greyish outside; tail pale brownish grey.

	feet.	inches.
Length from the nose to the extremity of the tail	2	$6\frac{1}{2}$
,, of tail		11
,, ,, tarsus and toes, including the nail		$5\frac{1}{2}$
,, ,, arm and hand, including the nails		$2\frac{1}{2}$
,, ,, face from the tip of the nose to the base of the ear . . .		$3\frac{1}{4}$
,, ,, ear		$2\frac{1}{4}$

Macropus Leporides, Gould in Proc. of Zool. Soc., Part VIII. p. 93.

This singular little Kangaroo, which I have made the type of a new genus, ranges widely over the interior; it is tolerably abundant in all the plains of South Australia, particularly those situated between the Belts of the Murray and the mountain ranges; I also hunted it successfully on the Lower Namoi; and skins were presented to me by the Messrs. Coxen, who, I believe, had obtained them on the Liverpool Plains. Judging from what information I could gather respecting it, I believe it to be peculiar to the interior, and never to frequent that portion of New South Wales which lies between the ranges and the coast.

Although belonging to that division of the family which includes the Rat and Jerboa Kangaroos, it differs from them in inhabiting a different character of country, in having a hairy muzzle, and in the hands and nails being smaller, more slender and more delicately formed than any other known species, points indicating that it is not a burrowing animal; and it is apparent from the sharpness and spiny form of the fore-nails, that they are never used for the purpose of obtaining roots, as is decidedly the case with the Rat and Jerboa Kangaroos. That the baldness or hairiness of the muzzle indicates a great difference in the habits, not only of this, but of every other group of animals, is sufficiently evident, although to what extent, is not yet perhaps perfectly understood. Mr. Ogilby has most happily seized upon this character for some of his divisions among the Antelopes. Mr. Ogilby states that the lips of those animals having hairy muzzles are strongly prehensile, and that they procure their food by browsing, while those having the muzzle bald are strictly grazers, and are perhaps less choice in the selection of their food; and from what I have observed in the Kangaroos in Australia, I am inclined to concur in the opinion of the scientific Secretary of the Zoological Society.

The name of Hare Kangaroo has been given to this species, as much from the similarity of its form, its size, and the colour and texture of its fur, as from its habits assimilating in many particulars to those of that animal. I usually found it solitary, and sitting close in a well-formed seat under the shelter of a tuft of grass on the open plains: for a short distance its fleetness is beyond that of all others of its group that I have had an opportunity of coursing. Its powers of leaping are also equally extraordinary: I may mention an incident connected with the chase of the animal which occurred to myself. While out on the plains in South Australia I started a Hare Kangaroo before two fleet dogs; after running to the distance of a quarter of a mile, it suddenly doubled and came back upon me, the dogs following close at its heels; I stood perfectly still until the animal had arrived within twenty feet before it observed me, when to my astonishment, instead of branching off to the right or to the left, it bounded clear over my head, and on descending to the ground I was enabled to make a successful shot, by which it was procured.

Considerable diversity of colour is observable in different specimens, some being much redder than others; but the sexes are scarcely distinguishable by size.

H.C. Hudson del.ª

ERETONGIA LUTESCENS, Gray.

C. Hullmandel Imp.

BETTONGIA RUFESCENS, *Gray.*

Rufous Jerboa-Kangaroo.

Spec. Char.—*Bett. vellere aspero; colore incanescenti-cinereo, et rufo, hôc apud dorsum prævalente; corpore subtùs e cinereo albo, fulvo tincto; auribus externè nigris, internè fulvescenti-albis.*

Descr.—Fur harsh and wiry; general colour grizzled-grey and rufous, the latter predominating on the back; ears black externally and buffy white internally; under surface greyish white slightly tinged with buff; tail strongly prehensile, covered with short wiry grizzly-grey hairs, becoming whiter towards the tip, where they are much lengthened; under side of the tail, throughout its whole length, dirty white; hands grey; nails white; tarsi and feet dark greyish brown.

	feet.	inches.
Length from the nose to the extremity of the tail	2	8
„ of tail	1	2
„ „ tarsus and toes, including the nail		6
„ „ arm and hand, including the nails		3
„ „ face from the tip of the nose to the base of the ear		$3\frac{1}{2}$
„ „ ear		$1\frac{1}{2}$

Bettongia rufescens, Gray in Mag. Nat. Hist., vol. i. New Series, p. 584.

Hypsiprymnus melanotis, Ogilby in Proc. of Zool. Soc. (May 1838) Part VI. p. 62.

This is a very common animal in New South Wales, where it inhabits sterile and low stony ridges, particularly such as are thinly covered with scrub and grasses. It appears to be almost universally dispersed over the face of the country, from the coast to the ranges; I also obtained a single example on the borders of the Namoi, but I have never seen it in collections from any other of the Australian colonies, and I believe it to be confined to the southern and eastern portions of the continent. It is a robust little animal, and as the structure of the fore-feet and claws would lead us to infer, obtains the greater portion of its food by scratching; shallow holes and small excavations, apparently formed for the purpose of procuring roots, being abundant in the districts in which it is found. It constructs a warm nest of grass in which it lies coiled up during the day, and which is frequently placed under the shelter of the branch of a fallen tree, or at the foot of some low scrubby bush. It also sometimes reposes in a seat like the Hare-Kangaroo, but never sits out on the open plains like that species. On being startled it runs for a short distance with remarkable rapidity; but from the circumstance of its invariably seeking shelter in the hollow logs, from which it is readily cut out, it falls an easy prey to the natives, who hunt it for food.

Independently of its larger size, which is equal to that of a full-grown rabbit, the Rufous Jerboa-Kangaroo may be easily distinguished from every other species of the genus by the wiry character of its fur, the rufous hue of the back, and the black colouring of the hinder part of the ears.

The food consists of various kinds of roots and grasses.

The sexes present little difference either in size or colouring.

BETTONGIA PENICILLATA. *Gray.*

H C Richter del. *C. Hullmandel Imp.*

BETTONGIA PENICILLATA, *Gray*.

Jerboa Kangaroo.

Spec. Char.—*Bett. fusca, ferrugineo-albo irrorata, corpore subtùs sordidè albo; auribus brevibus, rotundatis, et intùs pilis brevibus flavis indutis; tarsis pallidè fuscis; caudâ ferrugineo-fuscâ supernè; apice, per partem quartam longitudinis totius, pilis fusco nigris, floccosis, instructâ.*

Descr.—Fur moderately long, and not very soft to the touch; general colour brown; the hairs on the upper surface grey at the base, pencilled with rusty white near the tip, and black at the point; under surface dirty white; internal surface of the ear yellow; feet very pale brown; tail rich rusty brown above and pale brown beneath, the apical quarter clothed with brownish-black hairs, which are longer than those of the other parts of the tail, and form a kind of tuft.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	2	6	2	0
,, of tail	1	1		$11\frac{1}{4}$
,, ,, tarsus and toes, including the nail		5		4
,, ,, arm and hand, including the nails		$3\frac{1}{2}$		$2\frac{3}{4}$
,, ,, face from the tip of the nose to the base of the ear . . .		$3\frac{1}{2}$		3
,, ,, ear		$1\frac{1}{4}$		1

Bettongia penicillata, Gray in Mag. Nat. Hist. for Nov. 1837, vol. i. New Series, p. 584.
Hypsiprymnus murinus, Ogilby, in Proc. of Zool. Soc. Part VI. p. 63.

All my specimens of this little animal were collected in the interior, both on the Liverpool Plains and to the northward of them; I even found it plentiful on the Lower Namoi; but whether it does or does not inhabit the coast side of the ranges, and over what extent of the Australian continent it is found, I am unable to state, as I only saw it in the localities above-mentioned.

Like the other members of the genus, this species constructs a thick grassy nest, which is placed in a hollow scratched on the ground for its reception, so that when completed it is only level with the surrounding grass, which it so closely resembles, that without a careful survey it may be passed unnoticed: the site chosen for the nest is either at the foot of a bush or any large tuft of grass; during the day it is generally tenanted by one, and sometimes by a pair of these little creatures, which lying coiled in the centre are perfectly concealed from view; there being no apparent outlet, it would seem that after they have crept under they drag the grass completely over the entrance, when, as I have before stated, the whole is so like the surrounding herbage that it is scarcely perceptible. The natives, however, rarely pass without detecting its presence, and almost invariably kill the sleeping inmates, by dashing their tomahawk or heavy clubs at it. The most curious circumstance connected with the history of the Jerboa Kangaroo is the mode in which it collects the grasses for its nest: these, as may be seen in the accompanying Plate, are carried with its tail, which is strongly prehensile, and, as may be easily imagined, their appearance when leaping towards their nests with their tails loaded with grasses is exceedingly grotesque and amusing: this curious feat is even exhibited in a state of confinement, the Earl of Derby having a pair of them in his Menagerie at Knowseley, which evince the same natural habits, and which frequently load their tails with the hay of their nests, and carry it round the cage in which they are kept. The most usual resorts of the Jerboa Kangaroo are low grassy hills and dry ridges, thinly intersected with trees and bushes; and although not strictly gregarious, numbers may be found in the same locality. It is a nocturnal animal, lying curled up in the shape of a ball during the day, and sallying forth as night approaches in quest of food, which consists of grasses and roots, the latter being procured by scratching and burrowing, for which their fore-claws are admirably adapted, and their vicinity is frequently indicated by the little excavations they have made. When startled from their nest they bound with amazing rapidity, and always seek the shelter of a hollow tree, or a small hole in a rock, etc.

HYPSIPRYMNUS GILBERTII: *Gould.*

H. C. Richter del.

C. Hullmandel Imp.

HYPSIPRYMNUS GILBERTII, *Gould.*

Gilbert's Rat Kangaroo.

Spec. Char.—*Hyps. colore corporis supernè e cinereo, fusco, nigroque commixtis, lineâ nigrescente a naso ductâ cum colore frontis se intermiscente ; corpore subtùs e cinereo albo.*

Descr.—General colour of all the upper surface mingled grey, brown and black; produced by the base of the hairs being grey, the middle portion brown and black; centre and lower part of the back washed with reddish brown; a blackish line commences at the nose and blends into the general colour on the forehead; all the under surface greyish white; hands greyish brown; feet blackish brown; tail black, very thinly clothed with short hairs.

	feet.	inches.
Length from the nose to the extremity of the tail	1	10
,, of tail		$6\frac{1}{4}$
,, ,, tarsus and toes, including the nail		3
,, ,, arm and hand, including the nails		$2\frac{3}{4}$
,, ,, face from the tip of the nose to the base of the ear . . .		$3\frac{1}{2}$
,, ,, ear		1

Hypsiprymnus Gilbertii, Gould in Proc. of Zool. Soc., February 9, 1841.

Grul-gyte, Aborigines of King George's Sound, South Australia.

In its outward appearance this little animal closely resembles the *Hypsiprymnus Minor*, but on a comparison of the skulls of the two species a marked difference is observable, that of the present having the nasal bone more produced or swollen out at the sides; the tarsi and tail also are shorter in Gilbert's than in the *Hyp. Minor*. These *Hypsiprymni* are evidently analogues of each other, the former being found only on the western coast, while the other is confined to the eastern portions of Australia.

The animal here represented was procured at King George's Sound, where it is called *Grul-gyte* by the Aborigines. In dedicating it to Mr. Gilbert, who proceeded with me to Australia to assist in the objects of my expedition, and who is still prosecuting his researches on the northern portion of that continent, I embrace with pleasure the opportunity thus afforded me of expressing my sense of the great zeal and assiduity he has displayed in the objects of his mission; and as science is indebted to Mr. Gilbert for the knowledge of this and several other interesting discoveries, I trust that, however objectionable it may be to name species after individuals, in this instance it will not be deemed inappropriate.

A

MONOGRAPH

OF

THE MACROPODIDÆ,

OR

FAMILY OF KANGAROOS.

BY

JOHN GOULD, F.L.S., F.Z.S., &c.

PART II.

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NATIONAL MUSEUM OF VICTORIA

MACROPUS FULIGINOSUS.

Sooty Kangaroo.

Spec. Char.—*Mac. colore ferruginosè flavescente-fusco ; humeris dorsoque fuliginoso tinctis ; gulâ, et abdomine medio incanescentibus ; faciei lateribus, et rostro cum corpore concoloribus.*

Descr.—Fur of the body rather long and inclining to a woolly texture ; general colour rusty yellowish brown, darker and inclining to sooty on the shoulders and centre of the back ; hairs of the throat, back and abdomen grisly ; sides of the face and muzzle uniform and of the same colour as the body ; inner surface of the ear furnished with long white hairs ; external surface blackish brown ; toes and apical half of the tail blackish brown.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	7	3	4	$9\frac{1}{2}$
„ of tail	2	6	1	9
„ „ tarsus and toes, without the nail	1	0		$9\frac{1}{2}$
„ „ the ear		$4\frac{1}{3}$		$3\frac{1}{4}$
„ „ head		$9\frac{3}{4}$		7

Kangurus fuliginosus, Desm. Mammal., p. 273.

I MUCH regret never having met with this fine species of Kangaroo in a state of nature, or being able to gain any direct information respecting its true habitat, the extent of its range, &c.

Two fine specimens, male and female, form part of the Paris Collection, and a third, a female, is in the Leyden Museum ; the two former are the originals of Desmarest's description, and are said to have been brought to Europe by Peron from Kangaroo Island.

I am yet ignorant to which species the large Kangaroo of Swan River and the western coast generally is referable, but analogy would almost lead us to infer that the present may be the one, and not the *Macropus major* : should this ultimately prove to be the case, South Australia will in all probability be the country where the two species inosculate, as is similarly observed in many species, both of birds and quadrupeds. Any additional information on this head will be printed at the close of the work, with such addenda respecting other species as may have come to my knowledge.

The term *fuliginosus* is by no means applicable to the specimens above mentioned as they now appear ; but their long exposure to light in the Museums may have induced a considerable change in their colour, and the term may have been much more appropriate when applied to them by Desmarest.

HALMATURUS RUFOGRISEUS

HALMATURUS RUFICOLLIS.

Bridled Kangaroo (Wallaby).

HALMATURUS RUFICOLLIS.

Rufous-necked Wallaby.

Spec. Char.—*Halm. ferruginoso-fuscus, albo-irroratus; notâ albâ modicè distinctâ per labrum usque ad oculum ductâ; corpore subtùs cinerescenti-albo, pilis ad basin cinereis, ad apicem albis.*

Descr.—General colour rusty brown pencilled with white; fur on the back grey at the base, succeeded by rusty, broadly annulated with white near the extremity, and black at the point; neck and shoulders almost entirely of a bright rust-red; muzzle brownish black; on the upper lip a tolerably distinct white mark, which runs backward and terminates beneath the eye; apical half of the ear externally blackish; internal surface of the ear well clothed with white hairs, the tip narrowly margined with black; on the chin a patch of black; throat pure white; under surface of the body grey-white, the hairs being grey at the base and white at the extremity; arms bright rust-colour grizzled with black and rusty white; hands black; tarsi clothed with white hairs, all of which are brownish black at the base; toes covered with black hairs; tail hoary grey with a small pencil of black hairs at the tip.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	5	$3\frac{1}{2}$
„ of tail	2	$4\frac{1}{2}$
„ „ tarsus and toes, including the nail		9
„ „ arm and hand, including the nails		9
„ „ face from the tip of the nose to the base of the ear . . .		$5\frac{1}{4}$
„ „ ear		$3\frac{1}{8}$

Kangurus ruficollis, Desm. Ency. Méth. Mamm., p. 274.
——— *rufo-griseus*, Desm. Ib., p. 273.
Macropus ruficollis, Less. Man. de Mamm., p. 226.
Warroon of the Aborigines of the Illawarra district.

This species of *Halmaturus* has been long known as forming part of the continental collections, particularly those of Paris and Leyden; the specimens therein contained have been described under at least two specific names, *ruficollis* and *rufo-griseus*, and Mr. J. E. Gray believes that the *Macropus elegans* of Lambert is also referable to the same animal; an opinion in which, however, I cannot concur, as neither the drawing in the 'Linnean Transactions,' nor the accompanying description of the fur, which is said to be of "a beautiful silver-grey," at all agrees with the one here figured, in any state of its colouring. The *M. elegans* is, moreover, said to be very scarce in New South Wales, while the *H. ruficollis* is more abundant there than any other: the aboriginal name of the latter is *Warroon*, while that of the former is said to be *Ba-garee*; a further argument in favour of their being distinct.

The undefined markings and variable colouring of the present animal have much puzzled me, and I am led to suspect that the Brush Wallaby of Van Diemen's Land, to which Mr. Waterhouse has given the name of *Bennettii*, in honour of the late estimable Secretary of the Zoological Society, may be identical with it; and I am strengthened in this supposition, by having observed that, as we proceed from Van Diemen's Land northward through the islands of Bass's Straits to the continent of Australia, the thick dark-coloured fur gradually gives place to a thinner and rusty red coat similar to the figures here given, from examples taken in New South Wales; but should this supposition ultimately prove to be unfounded, it must be conceded that the larger species of Wallaby inhabiting Flinders and King's Islands will be referable to the present species, and not to *Bennettii*, whose habitat would then be confined to Van Diemen's Land. I may here mention, that Peron's specimens in the Paris Museum were collected on King's Island, and are the originals from which Desmarest took his descriptions of *ruficollis* and *rufo-griseus*. I hope ere long to receive perfect skeletons of this or these animals, as the case may be, from different localities, by which means alone can it be determined whether or not they are identical.

This species was formerly common near Sydney, but is now gradually retiring before the advance of civilized man; it is still, however, abundant in the thick *Daveysia* scrub on the table-land behind Illawarra, particularly on the fine estate at Bong-Bong, belonging to Charles Throsby, Esq., to whom I am indebted for many friendly attentions, and for his assistance in procuring fine specimens of this animal.

HALMATURUS UALABATUS.

Black Wallaby.

Spec. Char.—*H. vellere longo, rigido; nigrescenti fusco, pallidiore adsperso; corpore subtùs flavido, nonnunquam arenaceo, vel ferrugineo; auribus internè pilis sordidè albis instructis, et externè notâ ferrugineâ basali usque ad collum productâ, cinctis; antibrachiis notâ nigerrimâ basali.*

Descr.—Fur long, harsh to the touch; general colour blackish brown, pencilled with a lighter hue; under surface yellowish in some specimens, in others deep sandy or rusty red; ears clothed with dirty white hairs internally; a rusty patch surrounds their base, and is extended on the neck; cheeks pale brown, mingled with dirty white; upper part of the muzzle and round the eye blackish; lips and chin whitish; wrists and hand black; immediately beneath the insertion of the fore-arm a jet-black patch; tarsi black; basal third of the tail like the body, the remainder black.

	Male.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	4	4
,, of tail	1	4
,, ,, tarsus and toes, including the nail		$8\frac{1}{2}$
,, ,, arm and hand, including the nails		$6\frac{3}{4}$
,, ,, face from the tip of the nose to the base of the ear . . .		$4\frac{1}{2}$
,, ,, ear		$2\frac{1}{2}$

Macropus Ualabatus, Less. Man. de Mamm., p. 227.
Kangurus Brunii, Desm. Ency. Méth. Mamm., p. 275?
Halmaturus Lessonii, Gray.

This well-marked species inhabits, with but few exceptions, all the thick brushes of New South Wales, especially such as are wet or humid. I hunted it successfully at Illawarra, on the small islands at the mouth of the Hunter, and on the Liverpool ranges. In the former localities it was frequently found in the wettest places, either among the high grass and other dense vegetation, or among the thick mangroves, whose roots are washed by each succeeding tide. The islands at the mouth of the Hunter, particularly Mosquito and Ash islands, are not unfrequently flooded to a great extent, yet it leaps through the shallow parts with apparent enjoyment, and even crosses the river from one island to the other. On the Liverpool range it as strictly keeps to such parts as are most humid, often near the crowns of mountains, which are frequently enveloped in fogs and dews. Over what extent of country this species will be found to range it is impossible to say; as yet I have only observed it in the localities above mentioned; the dense brushes of the Clarence, Manning, and, in fact, all the brushes from Western Port to Moreton Bay, are in all probability inhabited by it.

Independently of its dark colouring, lengthened tail, and stiff wiry hair, it may be readily distinguished from every other species by the jet-black spot immediately beneath the insertion of the arm. When full grown this animal is about the size of *H. Bennettii* and *H. ruficollis*.

H.C. Richter del. et lith. — Smith, Elder & Co.

HALIAËTTARCTUS PALLASII.

HALMATURUS PARRYI.

Parry's Wallaby.

HALMATURUS PARRYI.

Parry's Wallaby.

Spec. Char.—*Halm. vellere modicè elongato, et molli; colore supernè ex argenteo cinereo, subtùs albo; vittâ latâ albâ per latera faciei ductâ, et ab albo colore gutturis disjunctâ, lineâ angustâ cinereâ.*

Descr.—Fur moderately long and soft; general colour silvery grey, the lower part of the back tinged with purplish brown; muzzle deep brown inclining to black, gradually becoming paler on the forehead until it passes into the grey of the upper surface; a broad pure white mark extends from near the tip of the muzzle along the cheeks, and terminates a little beyond the posterior angle of the eye; below this a faint grey line; ears nearly naked within, but having a few small white hairs on the apical portion; externally they are clothed with blackish brown fur at the base, with adpressed white hairs in the middle, and with black hairs at the tip; chin, throat, inner side of the limbs, under surface of the body and under side of the basal half of the tail white; the tips of the hairs on the chest faintly tinged with grey; arms hoary grey; hands black; tarsi and two inner toes white; the other toes black at the extremity, and with a mixture of black and white hairs at the base; tail nearly white, with the exception of the tip, which, with a fringe of long hairs on the under surface of the extremity, are black. The orifice of the pouch of the female is clothed with rust-coloured hairs, which also extend some little distance into the interior of it.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	5	5
„ of tail	2	7
„ „ tarsus and toes, including the nail		10
„ „ arm and hand, including the nails		8
„ „ face from the tip of the nose to the base of the ear . . .		$5\frac{1}{2}$
„ „ ear		$3\frac{1}{2}$

Macropus Parryi, Bennett, Trans. of Zool. Soc., vol. i. p. 295, pl. 37; and in Proc. of Zool. Soc., Part II. p. 151.
Macropus elegans, Lambert, Trans. of Linn. Soc., vol. viii. p. 318, pl. 16?

With this animal neither the colonists of New South Wales nor the naturalists of Europe are very familiar; not so much in consequence of its being really scarce, as from the extreme shyness of its disposition, the fleetness with which it escapes from its pursuers, and the mountainous and almost inaccessible parts of the country it inhabits. I did not succeed in procuring it myself while in Australia, it being confined, as far as I could learn, to the range of hills which stretch along parallel to the coast from Port Stephens to Moreton Bay, a part of the country not visited by me. Like most other members of its race, it is easily tamed, readily becoming familiar and docile.

At least two living specimens are on record as having been sent to England, both of which were presented to the Zoological Society; one by Captain Sir Edward W. Parry, R.N., after whom the animal has been named; and the other by James Macarthur, Esq.: I regret to add that they both soon died.

Sir Edward Parry states that his animal "was obtained at Stroud, near Port Stephens, in the latitude of about 30° south. It was caught by the natives, having been thrown out of its mother's pouch when the latter was hunted. At that time it was somewhat less than a rabbit, but was full-grown on its arrival in England. It was never kept in confinement until it was embarked for England, but lived in the kitchen, and ran about the house and grounds like a dog, going out every night after dark in the bush or forest to feed, and usually returning to its friend the man-cook, in whose bed it slept, about two o'clock in the morning. Besides what it might obtain in these excursions, it ate meat, bread, vegetables, in short everything given to it by the cook, with whom it was extremely tame, but would allow nobody else to take liberties with it. It expressed its anger when very closely approached by others, by a sort of half grunting, half hissing, very discordant sound, which appeared to come from the throat, without altering the expression of the countenance. In the daytime it would occasionally, but not often, venture out to a considerable distance from home, in which it would sometimes be chased back by strange dogs, especially those belonging to the natives. From these, however, it had no difficulty in escaping, through its extreme swiftness; and it was curious to see it bounding up a hill and over the garden fence, until it had placed itself under the protection of the dogs belonging to the house, especially two of the Newfoundland breed to which it was attached, and which never failed to afford it their assistance, by sallying forth in pursuit of its adversaries."

But little doubt exists in my mind that Lambert's characters of his *Macropus elegans* were taken from an animal of this species, although neither his figure nor his description are sufficiently correct to determine this point with certainty.

HALIAETUS ALBICILLA. Linn.

HALMATURUS AGILIS, *Gould.*

Agile Wallaby.

Spec. Char.—*Halm. fulvus, suprà nigro adspersus, infrà sordidè albus; aurium apicibus externis et margine antico nigris; strigâ fuscescente utrinque ab oculis usque ad nares productâ, et infrà hanc lineâ albâ; clunibus lineâ albidâ notatis; caudâ longâ pilis brevibus albidis, ad basin suprà flavidis, ad apicem nigrescentibus, indutâ.*

Descr.—Fur rather short, adpressed, and harsh to the touch; general colour sandy yellow; the upper surface of the head and body freely pencilled with blackish, the hairs being of this colour at the point; chin, throat and chest dull white; abdomen yellow, the hairs terminated with white; limbs pale sandy yellow externally and white on their inner side, the arms externally pencilled with blackish; tarsi nearly white, passing into rusty on the toes; lips whitish, and a whitish mark from the lip to beneath the eye, parallel with which is another of a dusky hue; ears white within, externally sandy yellow at the base and broadly margined with black at the apex, and with a narrow black line along the inner edge; on each side of the rump an oblique whitish line; tail sparingly clothed with nearly white hairs except at the base, which is like the body; the tip of the tail black.

	Male. feet.	inches.
Length from the nose to the base of the tail	5	3
,, of tail	2	6
,, ,, tarsus and toes, including the nail		10
,, ,, arms and hand, including the nails		9
,, ,, face from the tip of the nose to the base of the ear . . .		6
,, ,, ear		3

Halmaturus agilis, Gould in Proc. of Zool. Soc., Part IX. p. 81.

This new species of Wallaby may be readily distinguished from every other by its short, wiry, adpressed hair, and the almost uniform sandy brown colour of the body; the male is also remarkable for having very powerful incisors, and also for having the outer toe much developed, whence results a deep cleft between it and the middle one; the head is also longer and more pointed than in any other species which I have seen.

The Agile Wallaby appears to be abundant on all the low swampy lands of the northern coast of Australia. I have seen many specimens from the Cobourg Peninsula; and it is common both near the settlement of Port Essington and at Raffles' Bay. I have also had others placed at my disposal for the purpose of describing by Mr. Bynoe of H.M.S. the Beagle, which were collected on the shores of Torres Straits. It is stated to be a most agile species, readily eluding the dogs employed in hunting it by its extreme activity in leaping among the high grass; when chased it frequently seeks shelter in the thick beds of mangroves, passing over the muddy flats in such a manner as almost to baffle all pursuit.

In size, when full grown, the male is nearly equal to *H. Ualabatus*.

HALMATURUS THETIDIS, *Geoff. & F. Cuv.*

Pademelon Wallaby.

Spec. Char.—*H. vellere mediocritèr molli ; intensè fusco ; humeris, nuchâ, et colli lateribus ferrugineis ; mento et gulâ albis ; antibrachiis cinerescentibus ; antipedibus, pedibus, tarsisque saturatè fuscis ; caudæ lateribus vix pilis vestitis, et squamas epidermidis ostendentibus.*

Descr.—Fur rather soft; general colour deep brown; shoulders, sides and back of the neck rusty red; ears furnished internally with moderately long dirty white hairs; upper lip dirty white; chin and throat white; remainder of the under surface dirty white; arms greyish; hands brown; tarsi and feet uniform dark brown; tail brownish grey above and dirty white beneath; on the sides of the tail the hairs are scanty, and the scales covering the tail are very apparent.

	Male.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	3	0
„ of tail	1	0
„ „ tarsus and toes, including the nail		$5\frac{3}{4}$
„ „ arm and hand, including the nails		5
„ „ face from the tip of the nose to the base of the ear . . .		$4\frac{1}{4}$
„ „ ear		2

Halmaturus Thetidis, Geoff. & F. Cuv. Mamm., p. lvi.

Pademelon of the colonists of New South Wales.

Of the smaller species of Wallaby inhabiting Australia, the present is perhaps the one best known to the colonists, inasmuch as it is more abundant in New South Wales than any other. It is strictly a brush animal; and consequently only to be found in such localities. All the brushes I have visited from Illawarra to the Hunter, as well as those of the great range which stretches along parallel with the coast, are equally favoured with its presence; I have also received specimens from Moreton Bay. It is not unfrequently found running in the same locality, and even in company with the *H. Ualabatus*, although the very humid parts of the forest appear to be less suited to it than to that species.

As an article of food, few animals are so valuable, its flesh being tender and well-flavoured, and more like that of the Common Hare than that of any other European animal I can compare it with.

The sexes are precisely alike in colour, but the female is a trifle smaller in size.

The species appears to have been first brought to Europe by the French navigators, who applied to it the inappropriate term of *Thetidis* (after their vessel), which, however, it would not be right to alter. Having seen the original specimen in Paris, which is said to have been brought from Port Jackson, I am satisfied of its identity with my own specimens. I mention this circumstance, particularly as the name of *Thetidis* has been placed as a synonym of *Eugenii*, an animal brought home by Peron, and which I now believe to be identical with *H. Derbyanus*.

The *H. Ualabatus* must be classed among the smaller *Halmaturi*, being scarcely so large as *H. Derbyanus* or *H. Billardierii*.

OSPHRANTER ANTILOPINUS, *Gould.*

Red Wallaroo.

Spec. Char.—Mas. *Osph. vellere rigido, adpresso; colore ferruginoso, apud faciem et humeros pallidiore; corpore subtùs albo.*

Fœm. *Vellere minùs rigido et magìs laxo quàm in mare; colore ex arenaceo fuscescente, apud humeros, nucham, et faciem vinaceo-cinereo; notâ flavescenti-fulvâ ante aures, et alterâ pallidiore per labrum ductâ.*

Descr.—Male. Fur of the body rigid and adpressed; general colour rusty red, becoming paler on the face and shoulders, and white or yellowish white on the throat, chest, abdomen and inside of the limbs; hands and feet dark reddish brown, passing into black on the toes; tip of the tail reddish brown.

Female. Fur less rigid and more loose than in the male; general colour reddish sandy brown, passing into vinous grey on the shoulders, back of the neck and face; base of the ear externally dark brownish grey, passing into yellowish white towards the tips; immediately in front of the ear a conspicuous patch of yellowish buff; a light buff mark also extends from beneath the eye along the upper lip; throat, chest, abdomen and inside of the limbs pale yellowish white; hands and feet dark brown, becoming black towards the nails.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	7	3	5	6
„ of tail	2	9	2	3
„ „ tarsus and toes, including the nail	1	1		11
„ „ arm and hand, including the nails	1	2		11
„ „ face from the tip of the nose to the base of the ear . . .		$7\frac{1}{2}$		6
„ „ ear		$4\frac{1}{2}$		$3\frac{1}{2}$

Osphranter Antilopinus, Gould in Proc. of Zool. Soc., Part IX. p. 80.
Mar-ra-a-woke of the Aborigines of Port Essington.

From the period at which Australia was first visited by our enterprising navigators to the present time, our knowledge of its natural productions has been almost entirely confined to those of the narrow and limited tract of land bordering its eastern and southern shores; and it may fairly be said, that the whole of the zoology of the vast range of country washed by the seas of Torres' Straits is as much or more unknown than that of any similar extent of country in the world; and in exemplification of what I have here asserted of our ignorance of the productions of that region, I may mention that the noble Kangaroo here figured is only one of many new and interesting animals I have lately received from these parts. It is very abundant on the Cobourg Peninsula, and I have no doubt that, when the country towards the interior from these parts is explored, it will there be found in great numbers, particularly on the hilly ground, and that it possesses an extensive range, assimilating very closely in habits and economy to the great Black Wallaroo (*Osphranter robustus*), its remarkable analogue of the southern and eastern coasts.

Two very fine specimens, from which my figures and dimensions are taken, were collected by Mr. Gilbert while at Port Essington, and these in all probability are the only perfect specimens in Europe: the weight of the male was about one hundred and twenty pounds. Captain Chambers, however, late of H.M.S. Pelorus, has placed at my disposal, for the purpose of comparison, &c., several imperfect skins of this species, which clearly indicate that the animal frequently attains a much larger size; and that gentleman also assured me that he has himself seen examples weighing one hundred and seventy pounds; few species therefore exceed it in size, and certainly, with the exception of *Macropus laniger*, none in the richness of its colour and markings. Captain Chambers further informed me, that when hardly pressed in the chase it becomes exceedingly fierce and bold, and while among the rocks a most dangerous animal to encounter, one of his finest dogs being tumbled over a precipice and killed by an old male: in this fierceness of disposition it exhibits a striking resemblance to the Black Wallaroo; they also closely assimilate in the diminutive size of their females.

PETROGALE PENICILLATA, *Gray.*

Brush-tailed Rock Wallaby.

Spec. Char.—*P. vellere longo, subrigido; saturatè fusco, purpureo tincto; prymno et caudæ basi ferrugineis; humeris et lateribus saturatè vinoso-cinereis, hoc colore ab illo partium superiorum lineâ pallidiore et indistinctâ sejuncto; lineâ angustâ albâ a gutture per medium pectus ductâ; auribus nigris, ad basin cinereis; antibrachiis et antipedibus, tarsis pedibusque e ferrugineo nigris; caudâ nigrâ, perlongâ ad apicem floccosâ.*

Descr.—Fur long and rather harsh; general colour dusky brown tinged with purple, passing into deep rusty red on the rump and base of the tail; face dark grey; a dusky white mark commences at the lip and extends along the face to the ear; a narrow dark line runs from the middle of the forehead nearly half way down the back; shoulders and flanks dark vinous grey, separated from the general tint of the upper surface by an indistinct line of a lighter tint, in some specimens scarcely to be distinguished; a narrow white line extends from the throat down the centre of the chest; abdomen brown, becoming more rufous towards the lower part of the body; ears black, passing to grey at the base, and with a distinct band of rufous along the outer edge; arms and hands, tarsi and feet rusty black; tail black, very long, and clothed with long hairs forming a brush.

Some specimens are more red than others. The two sexes when adult are nearly of a size, and are similar in colour.

The entire length of the male figured in the Plate is forty-three inches, but a female which lived for some time in the menagerie of the Zoological Society measured forty-six inches.

	Male.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	3	7
,, of the tail	1	10
,, ,, tarsus and toes, including the nail		6
,, ,, arm and hand, including the nails		$5\frac{1}{2}$
,, ,, face from the tip of the nose to the base of the ear . . .		$4\frac{1}{4}$
,, ,, face		2

Macropus penicillatus, Gray in Griff. An. Kingd., vol. iii. pl. in p. 49.

Kangurus penicillatus, Griff. An. Kingd., vol. v. p. 204.

Petrogale penicillatus, Gray in Mag. Nat. Hist., vol. i. New Series, p. 583.

Heteropus albogularis, Jourd. Compte rendu des Séances de l'Acad. des Sci., Oct. 9, 1839, p. 522?

This species is the type of Mr. Gray's genus *Petrogale*, a well-marked group, comprising several kinds of Kangaroos, whose natural habits lead them to resort to rocky mountains, frequently those of the most steep and precipitous character; hence it is not surprising that so little has hitherto been known respecting this singular animal, since the inaccessible nature of the localities it inhabits precludes all opportunity for observation.

Two specimens, apparently young females, have for a long time formed part of the collection of the Linnean Society: they were received from New South Wales, a portion of the Australian continent where the species abounds wherever the kind of country suitable to its habits occurs. The specimens in my own collection were procured on the Liverpool range, and on the rocky sides of the mountains facing Yarrundi on the Dartbrook, a tributary of the Hunter. I also ascertained that it is very abundant on Turi, and the other mountains situated to the eastward of the Liverpool Plains, and it doubtless ranges over a much greater extent of country than we are yet acquainted with. It is considerably larger than any other species of the genus yet discovered, and like many other of the smaller Kangaroos is strictly gregarious, assembling in such numbers as to form well-beaten paths along the sides of the mountains they inhabit. Their agility in leaping from rock to rock is truly surprising, often alighting upon ledges so slight and narrow that it appears almost impossible for them to retain their footing: this power tends greatly to their protection, as neither the wily aborigine, nor their still greater enemy the Dingo, can follow them to their retreats. When closely pursued, and during the heat of the day, they seek shelter in the crevices and caverns among the rocks: to the caverns they evince a great partiality, usually, however, selecting those with more than a single outlet; a precaution rendered necessary by the frequent intrusion of the Dingo, who also resorts to similar situations.

The *Petrogale penicillata* is strictly nocturnal in its habits, and during the night frequently leaves its well-beaten tracks among the rocks for the grass beds on the crowns or base of the mountains, but never so far from its haunts as to be unable to retreat again on the slightest alarm. It also readily ascends the trunks of sloping trees, wearing a kind of track or path in the bark: while thus occupied the tail is not made use of, but hangs down unemployed.

As an article of food the flesh of this animal is most excellent.

PHALANGISTA LEPORINA. Gould.

PETROGALE LATERALIS, *Gould.*

Striped-sided Rock Wallaby.

Spec. Char.—*P. vellere et breviore et valdè molliore quàm in P. penicillatâ ; caudæ dimidio basali fuscescenti-cinereo, apicali nigro ; lineâ albâ conspicuâ ab apice usque ad auris basin ; notâ splendidè fuscâ inter scapulas oriente, per brachia posticè ductâ, per latera ; et intùs per femora ; hac notâ a colore corporis superioris disjunctâ lineâ albâ conspicuâ ; mento, gutture, pectore et abdomine arenaceo-rubris ; colli lateribus inferioribus cinereis.*

Descr.—Fur shorter and much softer than that of *P. penicillata* ; general colour reddish brown, passing into silvery grey on the neck and shoulders ; basal half of the tail brownish grey, the remainder black, with a brush at the end ; face greyish brown ; a distinct white mark from the tip to the base of the ear ; a black mark between the ears extending in a distinct narrow line half way down the back ; ears dark brown, becoming of a light sandy colour at the base ; a deep rich brown mark extends from behind the shoulders, down the back of the arm, along the flanks and down the inside of the thigh ; this mark is separated from the general colour of the back by a very distinct stripe of white ; chin, throat, chest and abdomen sandy red ; under sides of the neck grey ; arms light sandy red, passing into black on the hands ; tarsi reddish brown, passing into blackish brown on the toes.

	Male.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	3	5
,, of the tail	1	5
,, ,, tarsus and toes, including the nail		$5\frac{1}{4}$
,, ,, arms and hands, including the nails		$4\frac{3}{4}$
,, ,, face from the tip of the nose to the base of the ear . . .		4
,, ,, ear		$1\frac{7}{8}$

Petrogale lateralis, Gould in Proc. of Zool. Soc., for January 11, 1842.

This conspicuously marked species is very abundant in all the rocky districts of Swan River, and I have little doubt that the whole of the line of coast of Western Australia will hereafter be found to be inhabited by it, wherever the character of the country is suitable. Independently of its markings and the character of its fur, it is a much more diminutive animal than the *P. penicillata* ; the crania of these two animals also exhibit sufficient differences to satisfy the most sceptical mind of their being specifically distinct ; in disposition and economy, however, but little difference is found to exist between them.

Mr. Gilbert states that "it is only to be met with in the rocky parts of the interior intersected with caverns. It is a remarkably shy and wary animal, seldom venturing out during the day, but feeds at night in little open patches of grass, never, from all that I have been able to observe, going more than two or three hundred yards from its rocky retreats. When alarmed it leaps most extraordinary distances from rock to rock and point to point with the utmost rapidity."

PETROGALE INORNATA: *Gould.*

PETROGALE INORNATA, *Gould.*

Unadorned Rock Wallaby.

Spec. Char.—*P. facie et dorso arenaceo-cinereis; humeris canescente irroratis; lateribus pallidioribus absque notis conspicuis; antibrachiis tarsisque arenaceo-cinereis, digitis ad apicem saturatè fuscis; caudæ dimidio basali arenaceo-fusco.*

Descr.—General colour of the upper parts sandy grey, grizzled over the shoulders, and becoming much lighter on the flanks; an indistinct line of a lighter hue along the face under the eye; a dusky red patch behind the elbow; under surface sandy white inclining to rufous on the lower part of the abdomen; arms and tarsi sandy grey passing into dark brown at the extreme tips of the toes; basal half of the tail sandy brown, the remainder black, the former colour extending along the sides of the tail for some distance towards the tip; ears sandy grey, bordered by a very narrow line of dark brown on their inner edge; a dark patch at the occiput passing into a dark line down the forehead.

	Female.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	3	2
„ of tail	1	$3\frac{1}{4}$
„ „ tarsus and toes, including the nails		$5\frac{1}{4}$
„ „ arm and hand, including the nails		5
„ „ face from the tip of the nose to the base of the ear . . .		$4\frac{1}{2}$
„ „ ears		$1\frac{7}{8}$

Petrogale inornata, Gould in Proc. of Zool. Soc., for January 11, 1842.

This new species, for which I am indebted to the kindness of B. Bynoe, Esq., of H.M.S. Beagle, differs from all the other members of the genus in the unusual unformity of its colouring. Mr. Bynoe collected it on the north coast of Australia. In size it is about equal to the *P. lateralis* of the western coast, to which, as also to *P. penicillata*, it is very nearly allied, but differs from both in being destitute of any markings on the sides, in the absence of any dark colouring behind the ears, and in the light colouring of the arms and tarsi.

DENDROLAGUS URSINUS. *Müll.*

H C Richter del et lith. *C Hullmandel Imp.*

DENDROLAGUS URSINUS, *Müll.*

nob.

DENDROLAGUS INUSTUS, *Müll.*

[This page will be cancelled at the close of the work.]

DENDROLAGUS URSINUS, *Müller*,

AND

DENDROLAGUS INUSTUS, *Müller*.

A FIGURE of each of these two very remarkable and highly interesting species of Tree Kangaroos has been given in the fine work now publishing by my friend M. Temminck, entitled "Verhandelingen over de Natuurlijke geschiedenis der Nederlandsche overzeesche bezittingen," &c.; but as the text appertaining to those plates has not yet appeared, I am unable to give any further account of them than has been conveyed to me in a letter received from M. Temminck, who says:—

"The two species were discovered by our traveller M. S. Müller during his researches in New Guinea, and who has proposed for them the names here given: they were found at Triton Bay, and also inhabit the interior of the country; they are arboreal in their habits, climbing trees with the utmost facility."

M. Temminck adds, that M. Müller will shortly publish a highly interesting account of the habits and economy of these extraordinary animals, which will be given in the third part of this Monograph.

LAGORCHESTES CONSPICILLATA: *Gould.*

H.C. Richter del. et lith. *C. Hullmandel Imp.*

LAGORCHESTES CONSPICILLATA, *Gould.*

Spectacled Hare Kangaroo.

Spec. Char.—*Lag. vellere ut in* Lepore timido; *artubus parvis; caudâ ferè quoad longitudinem cum corpore coæquali; capite corporeque suprà fuscescentibus et flavescenti-albo nigroque adspersis; corporis partibus inferioribus sordidè albis; lateribus ferrugineo-flavescentibus; caudâ pilis brevibus sordidè albis parcè indutâ; tarsis sordidè albis; auribus intùs pilis flavescenti-albis; oculis pilis ferrugineis circumdatis; vellere corporis superioris ad radicem nigro.*

Descr.—Fur very long, dense, and rather soft to the touch; on the back it is of a black colour next the skin, yellowish white towards the apex, shaded into deeper yellow still nearer to the point, and black at the point; on the lower part of the back the portion of each hair, which is yellow on the back, is replaced by white, and there is an oblique white mark on each side of the rump; fur on the side of the body is deep grey next the skin, brownish yellow in the middle, followed by black, then whitish, and at the point black; on the under surface of the body the fur is ash-coloured next the skin, and white externally, excepting on the sides of the belly, where they are of a rusty yellow hue externally; the hair on the upper surface of the head is black, freely pencilled with yellowish white; a broad space round the eye is covered with bright rusty red hairs, and this hue, though less bright, is extended backwards beneath the ear; lips and chin dirty white; throat white; ears very small and somewhat pointed; internally they are clothed with whitish hairs, and externally with dirty white hairs on the apical portion, but towards the base there is an admixture of black; fore- and hind-legs and feet pale, the hairs being dirty white at the point and brown next the skin; tail slender, and being but sparingly clothed with short dirty white bristly hairs, exhibits scales; on the under surface it is more densely clothed, and the hairs are longer and of a dirty yellowish hue.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	2	$8\frac{1}{2}$
„ of tail	1	$1\frac{1}{2}$
„ „ tarsus and toes, including the nail		$5\frac{1}{4}$
„ „ arm and hand, including the nails		3
„ „ face from the tip of the nose to the base of the ear . . .		$3\frac{1}{4}$
„ „ ear		$1\frac{1}{4}$

Lagorchestes conspicillatus, Gould in Proc. of Zool. Soc., Part IX. p. 82.

I HAVE again to offer my thanks to the Officers of H.M.S. the Beagle for subjects they have contributed to my illustrations of Australian zoology, and especially for the loan of two fine specimens of this highly interesting *Lagorchestes*, the second species yet discovered of this beautiful form. It is to Capt. Wickham and Mr. Bynoe that science is indebted for its discovery. It was procured on Barrow Island, which lies off the north-western coast of Australia, about thirty miles from the main land. The two specimens collected by those gentlemen are fortunately male and female, and hence the subject is rendered so much the more complete. The specimen sent me by Captain Wickham has, by his desire, been presented to the national collection at the British Museum, and his example will, I feel assured, be followed by my esteemed friend Mr. Bynoe, as no exertion should be spared to render that collection, already so fine, as complete as possible.

This species is rather less in size than the *Lagorchestes Leporoïdes*; from which it is distinguished by its fur being more dense and harsh to the touch, by the extreme blackness of the basal part of the hair, by the shortness of its ears, by the want of the black patch at the base of the arm, and by the red colouring around the eyes being of a more brilliant rusty hue than in that animal.

The sexes are alike in colour and size.

BETTONGIA CUNICULUS.

H. C. Richter del. et lithog.

C. Hullmandel Imp.

BETTONGIA CUNICULUS.

Tasmanian Jerboa Kangaroo.

Spec. Char.—*Bett. vellere modicè longo, at non permolli, fuscescenti-cinereo, albo irrorato; pedibus fuscescenti-albis; caudâ ad basin pallidè fuscâ, deindè saturatè fuscâ; ad apicem albâ; auribus levitèr flavo marginatis.*

Descr.—Fur rather long and not very soft; general colour brownish grey, pencilled with white; feet brownish white; tail well clothed with pale brown hairs gradually passing into dark brown near the extremity, and tipped with pure white; margin of the ears slightly tinged with yellowish; under surface of the body dirty white; fur both of the upper and under surface grey at the base.

	Male.	
	feet.	inches.
Length from the nose to the extremity of the tail	2	6
,, of tail	1	1
,, ,, tarsus and toes, including the nail		$4\frac{3}{4}$
,, ,, arm and hand, including the nails		$3\frac{3}{4}$
,, ,, face from the tip of the nose to the base of the ear . . .		$3\frac{1}{2}$
,, ,, ears		$1\frac{1}{2}$

Hypsiprymnus Cuniculus, Ogilby in Proc. of Zool. Soc., Part VI. p. 63.
Forest Rat, colonists of Van Diemen's Land.

This species is a native of Van Diemen's Land, and so far as I am aware is confined to that island; on this point, however, from our imperfect knowledge of the zoology of Australia and the neighbouring islands, I cannot speak with certainty.

For the two fine specimens from which my figures were taken I am indebted to the kindness of my esteemed friend Ronald C. Gunn, Esq., now resident in Van Diemen's Land, and who, as is well known, has largely contributed to our knowledge of the natural productions of that island, zoological as well as botanical.

This species differs from *Bettongia penicillata* in many particulars, among the most striking of which are its much larger size, the more lengthened form of its head, and the conspicuous white tuft at the extremity of the tail; from all the other species of the genus yet discovered it offers still greater differences. Having compared my specimens with that in the collection of the Zoological Society, from which Mr. Ogilby took his description, and with another in the British Museum, I am satisfied of their identity. In both the British Museum and Zoological Society's specimen the extremity of the tail and consequently the white tip is wanting; hence the omission of this important character in Mr. Ogilby's description.

Although very generally distributed over the island of Van Diemen's Land, the Tasmanian Jerboa Kangaroo is very local, giving preference to the open, sandy or stony forest land rather than to the thick and humid brushes.

LEPTOGEN

The discovery of a fine species of Kangaroo from the north coast of Australia nearly allied to the *Petrogale robusta* of Part I., having induced the Author to form these two animals into a separate genus, to which he has applied the name of *Osphranter*, the page of letter-press here given, entitled *Osphranter robustus,* is to be substituted when the work is bound for that published in Part I., as *Petrogale robusta,* which is to be cancelled.

BETTONGIA FASCIATA.

Banded Jerboa Kangaroo.

Spec. Char.—*B. vellere longo molli, saturatè fusco, pilis ad basin cinereis in medio albis; exindè ferrugineo-flavis, ad apicem saturatè fuscis; vellere corporis superioris pilis longis albis sericeis, crebrè adsperso; dorso inferiore fasciis nigris vix conspicuis, transversìm notato; spatio circumoculari flavescenti-fusco; tarsis, et artubus posticis externè flavido lavatis.*

Descr.—Fur long and soft; general colour deep brown grey at the base, white towards the apex of the hairs, and rusty yellow shaded into dark brown at the point; fur of the upper surface interspersed with numerous long silky white hairs; on the lower half of the back are about twelve or thirteen, not very defined, transverse black bands, each of which is bordered above with white, and below with rusty yellow; throat and under surface white; chin, muzzle, and a space round the eye yellowish brown; tarsi and outer side of the legs tinged with yellow; hair of the hands and base of the toes whitish; internal surface of the ears white; tail covered with short, adpressed, grizzled grey and white, or in parts black and white hairs; about an inch and a half of the apical portion covered with longer black hairs.

	Male.	
	feet.	inches.
Length from the tip of the nose to the extremity of the tail	2	4
,, of tail		$10\frac{3}{4}$
,, ,, tarsus and toes, including the nail		$4\frac{1}{2}$
,, ,, arms and hand, including the nails		3
,, ,, face from the tip of the nose to the base of the ear . . .		3
,, ,, ear		$1\frac{1}{2}$

Kangurus fasciatus, Peron et Leseur, Voy. aux Terres Australes, tom. i. p. 114; and Atlas, pl. 27.—Desm. Ency. Méth. Mamm., p. 274.

Kanguroo élégant, Cuv. Coll. de Paris.

Halmaturus elegans, Cuv. Règne Anim., tom. i. p. 187.

Hypsiprymnus Leseuri, Quoy et Gaim.?

Three specimens of this elegant little animal form part of the collection of the museum at Paris, which, as far as I am aware, are the only examples that have yet been brought to Europe: after a careful examination of them upon two different occasions, I believe that they form part of that division of the family to which Mr. Gray has assigned the generic title of *Bettongia*, and that the species is most nearly allied to *Bettongia rufescens* and *B. Graii*; at the same time it exhibits in the character of its hair, but not in the form and structure of its teeth, some affinity to the members of the genus *Lagorchestes*.

The Banded Jerboa Kangaroo is a native of Dirk Hartogs, and other islands situated off the western coast of Australia: it was there observed in great abundance by Peron, whose notes are here given as comprising all that is at present known respecting it:—

"It inhabits the impenetrable low thickets, formed of a species of *Mimosa*, which are found in those islands; from these bushes it cuts away the lower branches and spines so as to form galleries communicating one with another, and where it takes refuge in time of danger. The females bring forth but one young at a time. Although abundant on the islands, none were to be found on the main land. These little Kangaroos, like all feeble animals which have neither the power of attack nor of defence, are extremely timid. The slightest noise caused them to take flight to the thick brushwood in which their galleries are constructed, and where it is impossible to pursue them; hence, although very common, they are difficult to procure.

"The flesh of these animals is said to resemble that of the rabbit, but has a slight aromatic flavour, arising probably from the nature of the plants on which they feed, nearly all of which are fragrant.

"All the females carried young in their pouch, and the devotedness with which they sought to save their offspring was truly admirable. Although wounded they flew with the young in the pouch, and never left them until, overcome with fatigue and loss of blood, they could no longer carry them; they then stopped, and squatting themselves on the hind legs, helped the young to get out of the pouch by means of the fore feet, and sought to place them in a situation favourable for retreat."

PETROGALE ROBUSTA, *Gould.*

Great Rock Wallaby.

Spec. Char.—*Petrogale artubus anticis magnis et prærobustis; vellere e fusco cinereo, infernè pallidiore; tarsis fuscis; digitis anticè nigris; antipedibus carpisque nigris; capite fuliginoso levitèr tincto; utrâque genâ lineâ albescente notatâ; gulâ, guttureque albidis; caudâ supernè fuscâ, subtùs pallidiore.*

Descr.—Male. Fur harsh and somewhat shaggy; general colour slate-grey, obscurely washed with brownish, and tinted with vinous on the outer sides of the thighs; feet dark brown, gradually passing into black on the fore-part; upper part of the arm brownish; hands and wrists black; inner surface of the ear white, the exterior brown; muzzle and a patch on the chin blackish; a line round the angle of the mouth and the lower lip white; throat and fore-part of the neck white, the hairs being grey at the base; under surface like the upper, but paler; tail blackish brown above, paler beneath.

Female. General colour silvery grey, obscurely tinted with purplish or vinous on the back; under surface nearly white; cheeks hoary, with a blackish patch on the chin; tail dirty white, slightly tinged with brown on the upper side; legs paler than the body; hands brown, becoming nearly black on the fingers; toes brownish black above.

	Male.		Female.	
	feet.	inches.	feet.	inches.
Length from the nose to the extremity of the tail	7	0	5	10
„ of tail	2	10½	2	6
„ „ tarsus and toes, including the nail		12	1	10½
„ „ arm and hand, including the nails		13½		9½
„ „ face from the tip of the nose to the base of the ear		8		7
„ „ ear		3½		3

Macropus (*Petrogale*) *robustus*, Gould in Proc. of Zool. Soc., Part VIII. p. 92.
Black Wallaroo of the Colonists.

The Great Rock Wallaby, which may be considered the Chamois among the Kangaroos, inhabits the summits of sterile and rocky mountains, seldom descending to the coverts of their sides and never to their base; few, therefore, have had an opportunity of observing it in a state of nature; indeed there are thousands of persons in Australia who are not even aware of its existence. Although the south-eastern portion of the continent is, I believe, the only part of the country in which it has yet been observed, in all probability it has an extensive range northwards. It is tolerably abundant on the Liverpool range, and I ascertained that it inhabited many of those hills that branch off on either side of this great mountain-chain, both towards the interior as well as towards the coast.

Like the other members of the genus, the *Petrogale robusta* is extremely agile among the rocks, and its retreats are so well chosen among the crags and overhanging ledges, that it is nearly useless to attempt its pursuit and capture with dogs. It is a formidable and even dangerous animal to approach, for if so closely pressed that it has no other chance of escape, it will rush at and force the invader over the edge of the rocks, as the Ibex is said to do under similar circumstances. Independently of its great muscular power, this animal is rendered still more formidable by the manner in which it makes use of its teeth, biting its antagonist with great severity.

The *Petrogale robusta* may be regarded as a gregarious animal, four, six and even more being frequently seen in company. On one of the mountains near Turi, to the eastward of the Liverpool Plains, it was very numerous; and from the nature of this and the other localities in which I observed it, it must possess the power of existing for long periods without water, that element being rarely to be met with in such situations.

The summits of the hills to which this species resorts soon become intersected by numerous roads and well-trodden tracks, caused by its repeatedly traversing from one part to the other; its food consists of grasses and the shoots and leaves of the low scrubby trees which clothe the hills it frequents.

Although much shorter in stature, and consequently less elegant in form, the fully adult male of this species equals in weight the largest specimens of *Macropus major*; and so remarkable is the difference in the colour and size of the sexes, that had I not seen them together in a state of nature, I should have considered them to be different species, the black and powerful male offering so great a contrast to the small and delicate female.

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